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ABSTRACT

This journal is devoted to the needs and interests of the school and college music teachers of Missouri and the United States. Articles in Volume 5, Number 1 are: "O. Anderson Fuller, The First Black Doctor of Philosophy in Music in America, and his Development of the Music Education Curriculum at Lincoln University" (S. Houser); "A Study Comparing Computer Pitch Drills with Piano Pitch Drills" (M. S. Milak); "Non-Participation of Freshman and Senior Boys in High School Chorus" (B. J. Kourajian); and "Selected Abstracts in Music Education" (n=8). Articles in Volume 5, Number 2 are: "Effect of Three Types of Music on Moods and Feelings" (W. B. Lathom; B. Lubin; L. Havlicek); "The Effect of the Use of 'Music Speed Reading' on the Sight Reading Ability of Senior and Junior High School Instrumentalists" (W. J. Leafblad); "The Collegium Musicum as a Viable Performing Group on the Technological Campus" (J. Kramme); "An Investigative Study of Young Children's Vocal Problems and Remedial Needs" (N. van Zee); "Music and Music Education in the Koreshan Settlement, Estero, Florida" (L. B. Hilton); and "Selected Abstracts in Music Education" (n=10). Articles in Volume 5, Number 3, are: "Effect of Improvising in Given Rhythms on Piano Students' Sight Reading Rhythmic Accuracy Achievement" (D. R. Montano); "Investigation of a One Note--One Name Rhythm Reading Instruction Model" (J. T. Jetter); "Dimensions in the Meaning of Choral Experience: A Reexamination" (J. Hylton); "A Study to Ascertain the Commonly Preferred Elements in Brass Warm-Up Routine" (R. J. Altman); "Discrimination and Consistency of Judgment of Musical Balance of Wind Quartets" (T. Austin); "Comparative Methods for Teaching Irregular Meter through Balkan Music to Elementary School Students" (F. M. Irwin); and "Selected Abstracts in Music Education" (n=13). Articles in Volume 5, Number 4 are: "Comparison of Music Teaching Self-Evaluations before and after Videotape Feedback" (W. L. Sims); "A Survey of Instrumental Music Scheduling Status in Public Schools of Southeast Missouri" (M. Creech); "How Did We Do It in the Past?" (J. T. Jetter); "A General Survey of the Competition-Festival to 1960" (D. L. Oakley); "A Commentary--Teaching Listening, Breathing Support and Sensitivity through the a cappella Art" (B.

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Vantine); and "Selected Abstracts in Music Education" (n=9). Articles in Volume 5, Number 5 (Editors: Franklin W. Koch and Wendy Sims) are: "The Use of an Objectively Constructed Rating Scale for the Evaluation of Brass Juries: A Criterion-Related Study" (M. J. Bergee); "The Effect of Traditional Music Class versus Repeated Listening on the Music Preferences of Kindergarten and Primary Grade Children" (V. Burnsed; H. Price); "The Use of Rehearsal Time by an Experienced Choral Conductor with a Children's Choir" (R. S. Moore); and "Index of Articles in the 'Missouri Journal of Research in Music Education, Vol. I-IV'" (F. Willman). (BT)

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# Missouri Journal of Research in Music Education, 1982-1988

Jack R. Stephenson and Franklin W. Koch, Editors

Volume 5, Numbers 1-5

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# MISSOURI JOURNAL OF RESEARCH IN MUSIC EDUCATION

Volume V
Number 1
1982-1983

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Volume V 1982-1983 Number 1

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## PREFACE

The *Missouri Journal of Research in Music Education*, published by the Missouri Music Educators Association, is devoted to the needs and interests of teachers of music in Missouri and the nation. This issue, Volume V, Number 1, is the twenty-first.

The members of the editorial committee are grateful to those readers who have written suggestions concerning the content of past issues and request that criticisms and suggestions again be sent to the editor concerning the content of this issue. We strive for a reasonable balance among music theory, history, philosophy, aesthetics, and pedagogy.

We express our deep gratitude to the Missouri Music Educators Association for their financial support to make it possible to continue to publish the *Missouri Journal of Research in Music Education*.

The Editorial Board

# *O. ANDERSON FULLER, THE FIRST BLACK DOCTOR OF PHILOSOPHY IN MUSIC IN AMERICA, AND HIS DEVELOPMENT OF THE MUSIC EDUCATION CURRICULUM AT LINCOLN UNIVERSITY

Steven Houser
Lincoln University, Jefferson City,
Missouri

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## CHAPTER I

## INTRODUCTION

Oscar Anderson Fuller was the first black to receive a Doctor of Philosophy degree in music (A. Greene, 1945, p. 115). His contributions in music education and his consistent efforts to bring higher education to all

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*Dissertation for Degree, Doctor of Philosophy, University of Missouri-Columbia. Dissertation Supervisor: James A. Middleton.

students are the positive concerns of this paper. As this study will document, Dr. Fuller was able to transmit his knowledge of music and love of music against an American background of negative racial attitudes. He worked at Lincoln University from 1942 to 1974 and included the time periods of World War II and the 1954 Supreme Count desegregation mandate (Lincoln University Personnel Office, Jefferson City, Missouri). These two events in American History had a significant impact on Lincoln and its Department of Fine Arts.

## Purpose

The purpose of this study is to present and document the achievements of the first black Doctor of Philosophy degree recipient in music. This work will include a critical evaluation of Dr. Fuller as a musician and educator and his work at Lincoln University. Dr. Oscar Anderson Fuller, through the inner strength that subsequently served him for many years at Lincoln University, became the first black American music educator to receive a Doctor of Philosophy degree.

The citizens of the State of Missouri have nourished a unique development in music education by supporting and sustaining the growth of Lincoln University, located in Jefferson City, Missouri. Prior to the Supreme Court decision of 1954, Lincoln was a predominantly black institution which met the desperate higher educational needs of many American blacks. Certification of teachers was a prime concern, for there were few certified black teachers for the American segregated school system.

Dr. Fuller distinguished himself at the University of Iowa in his master's work and subsequently received the Doctor of Philosophy degree from the University of Iowa. Lincoln University secured the services of Dr. Fuller for the university music program and Dr. Fuller began his development of a certified music education program. This program gained distinction because of the many blacks who graduated and served and are now serving our state and country in educational and professional music careers.

## Procedure

Through consultation with Dr. Ralph Glauert, the determination was made that the appropriate thrust of this study would be to present the work of Dr. Fuller in juxtaposition to the background of the American racial attitudes which were prevalent prior to and at the time period of the early 1940s. The relief to this background will be a synopsis of Lincoln University and its growth within the State of Missouri. It is believed that the validity and credibility of Dr. Fuller's work will seem most worthy particularly after the reader is aware of the American cultural and social attitudes that were prevalent at the beginning of Dr. Fuller's work.

Concomitantly with the reading of extensive data concerning the racial climate of the early 1900s to the early 1940s, tape interviews were held with Dr. Fuller. These interviews were concerned with his maturing years and his work at Lincoln University. As the reader will note in the Appendix of this study. questionnaires were sent to students, faculty, administrators and community people who worked with Dr. Fuller. Printed sources of Dr. Fuller's work included office records, National Association of Schools of Music correspondence, Lincoln University records, State of Missouri records, and newspaper records.

## Delimitation

The delimitation of this study is Dr. Fuller and his work in the music program at Lincoln University. The degree granting music programs were initiated by Dr. Fuller and were developed from 1942 to his retirement in 1974.

# CHAPTER II

## AMERICAN ENVIRONMENT FOR BLACKS
## c. 1900-1940

The attitude carried into the twentieth century by the American black person about himself had been one of servitude. From the 1700s and the 1800s slavery was the dominant life style for American blacks (Social and Economic Status, 1978, p. ix). Unfortunately, the road to social and economic improvement for blacks was not paved by American legislative action. The societal paths toward improvement in financial and social status had occurred by forces outside of the power of national mores and government laws. These external forces such as the Civil War, World War I, World War II and peace time industrial manpower needs were the primary stimuli toward improved financial condition and improved social status.

In the first three decades of this century almost forty percent of all blacks still worked on Southern farms. Some improvement had been made in infant mortality and adult longevity; however, any modest social improvements were affected adversely by the Great Depression of 1930.

The institutions that served as a source of escape for blacks were the institutions of education and religion. With a few exceptions, these institutions have not been the white educational and religious institutions, but the black operated educational and religious institutions (Brown, 1976, p. 93). The entertainment industry served to a limited extent as an escape route from slavery; however, black entertainers generally extended to the commercial stage behavior that was expected on the plantation. The black entertainer usually had to migrate to Europe before he could expect to receive any significant degree of honor and respect (Morrison, 1969, p. 3).

There were several black leaders such as Booker T. Washington, Paul Laurence Dunbar and W. E. Burghardt Dubois who were struggling to provide leadership to their people. The blacks were listening; however, often the messages were confusing as to what path to travel. Were they to learn by their minds as Dubois, a former professor at Howard University, stated:

> If we make money the object of man-training, we shall develop money-makers but not necessarily men; if we make technical skill the object of education, we may possess artisans but not, in nature, men (1969, p. 33).

Dr. Dubois intended to recruit from the American black race those individuals who were able to contribute with their minds to the advancement of the black race. Dr. Dubois claimed that the past achievements of American blacks were due to those talented black individuals who were able to guide, heal, and instruct their black brothers and sisters. Dr. Dubois strongly stated that the role of black education was to find the top ten percent of the black race and to develop the future leaders for the American black population. As quoted by Dr. Dubois,

> Can the masses of the Negro people be in any possible way more quickly raised than by the effort and example of this aristocracy of talent and character? There can be but one answer. The best and most capable of their youth must be schooled in the colleges and universities in the land (1969, p. 45).

The other course for black advancement was championed by Booker T. Washington, President of the Tuskegee Institute. Washington, by contrast, emphasized the vocational opportunities at his Tuskegee Institute. As stated by Washington, "I believe the way for redemption of the Negro was being prepared through industrial development." (Washington, 1976, p.10). Indeed, the ability of Mr. Washington to convince white contributors to his institute was based on his assuring the whites that he was preparing for them an educated work force for their labor demands. Mr. Washington summarizes in an article supporting industrial education:

> . . . that as a slave the Negro was worked, and that as a freeman he must learn to work. Our pathway must be up and through the soil, up through the swamps; up through forests, up through streams, the rocks, up through commerce, education and religion.

Although these men (Dubois and Washington) were on different roads, their destination was the same--for the qualitative improvement of all blacks (Brown, 1976, p. 93).

Education holds a special place for blacks. Blacks view education as the opportunity that will provide them with economic and social advantages (Social and Economic Status, 1978, p. 87). Regardless of the direction of black higher education, whether for vocationally or academically oriented, they all were concerned with motivating and training the black person (Thompson, 1973, p. 5). Only the institutions of higher learning administered by blacks were most sensitive to the needs of blacks. Though these black colleges experienced a tremendous amount of opposition, "large numbers of parents manifested a determined willingness to send their children to these schools." The successful effort of the American black may be observed by noting that from 1860 to 1920 literacy rose from 3 percent to 77 percent. While literacy improved, the grade attained in formal education was limited. By 1940, only one out of ten blacks had graduated from high school. (Social and Economic Status, 1978, p. 87).

Although education was of major importance, there were other concerns for American blacks. The quality of life as measured by health standards and legal treatment were important negative factors. The health and mortality of blacks at the beginning of the Twentieth Century was markedly different than for whites. The probability of blacks dying from communicable diseases was close to 40 percent. The mortality difference from whites was about fifteen years.

The legal process for the black was as depressing as the education, health and mortality statistics. Between 1889 and 1918 there were 2,522 known lynchings of blacks (L. Greene, 1980, p. 96). Black pleas for enforcement of the law brought little or no response from the white legal order. Although there was some black congressional representation at the state and national level immediately after the Civil War, by the beginning of the Twentieth Century most political gains had been eliminated (Social and Economic Status, 1978, p. 154). Specifically to Missouri, the pattern of the white political process was for the major parties to promise blacks that their concerns would be addressed and then after the election all concerns would be forgotten (L. Greene, 1980, p. 98).

Life for the American black at the turn of the Twentieth Century was at best a limited living experience. The political and legal process rarely addressed black concerns. Educationally, the black leaders were struggling to open and maintain a vision; however, by 1940 still only one black in ten graduated from high school.

As the 1900s progressed, little improvement had been made in the area of civil rights. "The American Negro problem is a problem in the heart of the American. It is there that the interracial tension has its focus" (Myrdal, 1944, p. LXIX). As Mr. Myrdal documents, little of substance had been accomplished since the Civil War. Job restrictions, residential restrictions and union "exclusionist policies" effectively retained the black economic situation relative to other ethnic assimilations.

Politically, the blacks were still being misused. The party machines were particularly corrupt wherever there were large populations of blacks. Even with the promises of the New Deal, economic and political opportunities were of little consequence to most blacks. By the time the federal laws sifted through the state, county and city levels, the promise for better treatment and hope for blacks had been effectively eliminated.

The black church and black education still were the only routes that promised any manner of quality living. As Mr. Myrdal notes,

> They bring Negroes together for a common cause. They train them for concerted action. They provide an organized fellowship for Negro leaders. In these institutions, theories of accommodation and protest become formulated and spread. These institutions sometimes take action themselves in the power field, attempting to improve the Negro's lot or voicing the Negro protest. Even more often they provide the means by which Negro leaders and organizations, which are more directly concerned with power problems, can reach the Negro people.

Education was still the primary vehicle blacks had for any hope of breaking from the imposed caste system. Unfortunately, the black student knew his possibility of employment was slim, so that the student was justifiably confused as to where his efforts should be directed. The reward for those blacks who survived the educational system and retained employment was often negligible. "Black scholars are likely to be treated as invisible persons. Their research reports, interpretative articles, and analyses are seldom cited in the scientific literature" (Willie, 1978, p. 9). Black colleges survived primarily from Northern philanthropic organizations, not from local white community support, state or federal support (Myrdal, 1944, p. 892). The black student of the late 1930s and early 1940s was not able to be a part of the main educational stream.

> Because of the position of the Negro masses in America the Negro student has been inevitably out of contact with the student movement, both in America and abroad, and whenever there has been contact, it has been of a consciously 'interracial' character and falsified by philanthropic motives (Garritt, 1970, p. 95).

If by perserverance and luck the black student was able to make the long climb, he tended to find employment in what was regarded as "ghetto professionals." These professionals were limited to practice in the segregated areas of the local black population. Gunnar Myrdal concludes: "man is a free agent, and there are no inevitabilities. All will depend on the thinking done and the action taken in the region during the next decade or so. History can be made. It is not necessary to receive it as mere destiny" (1944, p. 520).

Certainly in the next decade history was made by blacks. They did not receive it as mere destiny. Dr. Fuller and many other dedicated educators were working within a framework of a disciplined hope that their vision would prove valid for their students and their students' children.

# CHAPTER III

## LINCOLN UNIVERSITY--A BRIEF HISTORICAL SYNOPSIS FROM 1866 TO 1942

The conception for Lincoln University originated with the 65th and 62nd United States Colored Infantry Regiment of the Civil War. Since the majority of the men who discussed the matter of founding an institution of higher education were from Missouri, the geographical location was to be somewhere in Missouri (Savage, 1939, p. 1).

Many of the men had learned to read and write while in the army and these men wanted others of their race to have an opportunity to learn. Unfortunately, prior to the Civil War the teaching of reading and writing to blacks was considered a crime in the state of Missouri

(L. Greene, 1980, p. 49). At about the same time that this idea to create an institution of higher learning was gaining support, the War Department ordered the departure of many of the officers who had served in this unit. First Lieutenant Richard Baxter Foster was selected by the men to take the contributions that had been gathered from the men and go forth to Missouri to establish this opportunity for higher education (Savage, 1939, p. 1). The contributions totaled approximately $6,000. The following resolution was adopted for the founding of Lincoln University:

> Whereas, the freedom of the black race has been achieved by war, and its education is the next necessity thereof, resolved, that we, the officers and the enlisted men of the 62nd United States Colored Infantry [organized as the First Missouri Volunteers, A. D.] agree to give the sums annexed to our names to aid in founding an educational institution, on the following conditions:
>
> First, the Institute shall be designed for the special benefit of the freed blacks.
>
> Second, it shall be located in the state of Missouri, with labor, so that the old habits of those who have always labored, but never studied, shall not be thereby changed and that the emancipated slaves, who have neither capital to spend nor time to lose, may obtain an education (Marshall, 1966, p. 3).

"This did not mean that the persons of other races could not attend the school, but that it had been established especially for the benefit of the Negro" (Savage, 1939, p. 3). Mr. Foster then left the regiment and met with black leaders of St. Louis who were supportive of his charge to create an educational institution. As the institutional concept developed from the charge which Mr. Foster had from the regiment and from his meetings with the educational supporters in St. Louis, two objectives were formed. The two objectives of the Lincoln Institute (the name given and as listed in its State of Missouri Articles of Incorporation, June 25, 1866), were that it should be a center for (1) academic training, and for (2) industrial training. The objective of industrial training was successful to a limited extent, but not nearly as successful as the growth of the academic objective. Financial support for Lincoln was so limited, that any major equipment purchase for vocational training was not possible. Daily requirements such as food, building repairs and coal for heat consumed the major part of the school's financial resources.

The beginning years of the Lincoln Institute were difficult times. Lieutenant Foster was charged by the Board of Trustees to begin school on September 14, 1866; however, there were a few obstacles such as limited financial resources and no buildings in which to begin Lincoln Institute's first class. "He was refused permission to use the basement of the Negro Methodist Church because the teachers would be white. Then he was refused the use of the white Methodist Church basement because the pupils would be Negroes." Foster finally applied to the township to use a "dilapidated structure near the Missouri River. The building was filled.[with students] and crowded within a few days, and the services of Mr. Festus Reed were secured to share the burden of teaching the pupils" (Marshall, 1966, p. 5). Lincoln was able to erect its first structure in 1871. This structure was sixty by seventy feet and three stories tall.

Financial contributors and more supporters during these difficult times came from friends from the eastern coast of the United States, St. Louis political leaders and Jefferson City state educational supervisors. As an interesting aside, the reader may wish to know that "Jesse James, the notorious outlaw, gave money on two occasions." One important note during this period was the passage of a bill to establish a State Normal School for Training Negro Teachers at Lincoln (Savage, 1939, p. 14). This legislative action occurred on February 14, 1870 and with the support of the State Superintendent of Public Instruction: that Lincoln be a part of the institutions to be designated under the Morrill land-grant act. As a result of the land-grant act federal monies were becoming significant to the state of Missouri. Lincoln benefited from this federal funding of higher education because blacks were not allowed to attend other institutions of higher education in the state of Missouri. An industrial school was established in 1891, at Lincoln. Section one of the Appropriations Act of the Thirty-Sixth Missouri General Assembly states the purpose of the industrial school.

> There is hereby established as a department of Lincoln Institute an industrial school, in order that the negro youths of this state may receive instruction in those branches of study relating to agriculture and the mechanic arts, and thereby fit themselves to engage in the useful trades (Laws of Missouri, 1841, p. 22).

Although semester to semester existence was still a real struggle, the beginning of state and federal financial assistance and state recognition of Lincoln's efforts at least had begun to exist. Although Lincoln, from its beginning, viewed itself as an institution open to all races, the legislature of Missouri thought of Lincoln as a school for blacks. The legislative viewpoint confirmed Lincoln's financial plight. One may also take the position that if the white legislature had viewed education as a right of equal opportunity for all people of all races, Lincoln would have been consistently funded in a more appropriate manner.

1879 was the next survival point of the school, for this was the year the state of Missouri accepted the deed of transfer of Lincoln Institute to become a state normal school, "entitled to support by the state." The unfortunate part of this action was that the institutional leaders mistakenly thought this state action was the answer to their financial problems and the leaders allowed their eastern funding sources to dissolve. This mistaken belief has proved to be costly and Lincoln still suffers from this decision. The endowments and alumni support were never established and nurtured, based in part on the continuing illusion that the state would recognize and then adequately support the needs of Lincoln.

> In his report in 1910 to the Superintendent of Public Instruction, Lincoln President Benjamin Franklin Allen said 'that Lincoln Institute was making as much progress as the other educational institutions in the state of Missouri. The money which had been appropriated, he thought, was economically and wisely spent and the returns were commensurate with the appropriations.' This was undoubtedly true, because no school in the state had attempted so much on such a small appropriation (Laws of Missouri, 1891, p. 127).

Lincoln was charged with extremely broad educational demands. The school was the center not only of higher education, but was also a center for elementary and high school black students. Additional information on this point will be quoted from Dr. Fuller in a subsequent chapter. Since many of the institute's presidents came from the eastern United States, the curriculum followed "the pattern of the New England college which placed emphasis upon classics and mathematics." The New England college historically has offered degrees in disciplines such as history, language, business, law and mathematics. The disciplines of music and art were provided as enrichment electives. Lincoln's developmental years followed this pattern.

Despite low state appropriations, low teacher pay, day to day problems such as basic supplies, food and building maintenance problems and community suspicion, Lincoln survived. Reporting on community concerns for Lincoln has been the role assumed by the local newspaper in general. Institutional activities such as appropriation expenditures, discipline actions, ceremonies and committee reports which would seldom be of concern to the community have often been front page news in Jefferson City. In the opinion of this writer this publicity may be because Lincoln has a greater percentage of black students and black administrators than the other state supported Missouri institutions of higher education. Survival was in large measure due to the missionary effort by the teachers and administrators to keep the school going at a quality level for the elementary, high school and college people who attended Lincoln.

> The feelings of the general Missouri white attitude toward blacks was not good. A report in 1941 by the Missouri Association for Social Welfare summed up the situation. Writing for the association, white Missourian Roger Baldwin declared 'that so

> much of the problem [Missouri's segregation efforts] lies in the unthinking, inconsiderate attitude of white people that no specific remedies for present conditions can be proposed which in themselves offer any solution.' The future looked bleak indeed (L. Greene, 1980, p. 105).

Through an act of the 1921 Missouri Legislature, Lincoln Institute became Lincoln University (Johnson, 1981, p. 559). This was one of a very few favorable years for Lincoln in its ability to solicit desired needs and adequate financial support from the legislature (L. Greene, 1980, p. 167). The legislative action to change the name from Lincoln Institute to Lincoln University was an effort in "providing for organization and scope for higher education of negro race" by the state of Missouri (*Laws of Missouri*, 1919, p. 86). Lincoln was still viewed as the alternative to white undergraduate education in the state of Missouri. The expanded role of Lincoln, as deemed by the legislature, resulted in an increase in appropriations. These appropriations were needed for salary adjustments and building maintenance. Governor B. Gratz Brown, in 1921, praised Lincoln, as "a school for teachers with general instruction, has been most signal and salutary" (Avery-Shoemaker, 1924, p. 43).

The importance and significance of obtaining a greater degree of legislative and financial support in 1921 was to become self-evident by accreditation. Accreditation by the North Central Association of Colleges and Secondary Schools was given to Lincoln's high school in 1925, to Lincoln's teacher-training program in 1926, and to "the four-year college of arts and sciences in 1935" (Johnson, 1981, p. 559).

Throughout the years, Lincoln constantly struggled to exist and struggled to maintain self-imposed quality standards against a state that generally gave little regard to educating black people. The 1921 legislative action was a most exceptional situation. Indeed, people in Missouri who were in the power structure generally gave little more than benign lip service to educating people of all races. "Yet in defiance of the odds, Missouri blacks seemed to rise Phoenix-like from their ashes. They forged a sound but segregated educational system for blacks before the U.S. Supreme Court finally erased the separate but equal premise" (L. Greene, 1980, p. 5).

The following extended quote is intended as a summation of the social boundaries and human treatment that existed for blacks in America. The writer began this section by establishing the national racial attitudes from the early 1900s to the 1940s. The next section focused on the establishment of Lincoln University, and its efforts in securing financial support. The following encounter experience documents a common person to person plight of the Jefferson City black experience. Dr. Lorenzo Greene, Ph.D., Columbia University, arrived at Jefferson City, Missouri, in September, 1933, to begin his distinguished career at Lincoln. The following was his introduction of Jefferson City and his conversion to the ideals of Lincoln University.

> I arrived in Jefferson City for the first time on a hot, sultry evening in September, 1933. I had just completed an overnight trip from New York City to accept a position teaching history at Lincoln University. As I lugged my bags off the train, I had one overriding desire: to reach the university as quickly as possible. Fortunately, several taxis were parked near the station. I hailed one. The first white driver ignored me.

The next let me have it straight: 'We don't haul niggers. Get that nigger cab over there.' Stifling my anger, I took my bags to where two taxis, driven by blacks, were parked.

Enroute to the university, we passed through a slum area which the cab driver called The Foot. The school stood atop a hill covered with beautiful trees, shrubbery, and flowers. It was a lovely sight. I was met by a French professor who was acting as caretaker while the president was out of town. He took me to Foster Hall, a freshman dorm, and gave me a room. I quickly showered, changed clothes and sallied forth to my first meal in Jefferson City.

Across the street from the campus stood a small restaurant. As I approached it, my heart sank. A nauseating smell of rancid grease overwhelmed the fragrance of nearby honeysuckles. Worse, even before I crossed the street, the sight and sound of swarms of bugs and flies, covering and striking against the screen door of the restaurant, literally turned my stomach. I put on a bold face, flailed away at the insects, and quickly entered. The room was dingy and dirty. The proprietor, perspiring and swatting at the winged insects that seemed intent on taking over the place, offered me a seat. Knowing that it would be impossible for me to eat there, I ordered something not included on the menu. 'Sorry,' the waitress said unsmilingly, 'but we are out of that.' 'Is there another restaurant nearby?' I asked. 'Yes, there is one in the hotel down the street but it is closed now,' the owner answered. I then inquired whether there was a drugstore open. 'Four blocks down the street,' the man replied.

The drugstore had a lunch counter. It was now nearly ten o'clock and I was hungry. I sat down at the counter. A young man asked me what I wanted. 'A hamburger and a vanilla malted milk,' I said. 'I am sorry,' he replied, 'but we don't serve colored here.' I felt both angry and embarrassed, particularly since several white customers were intently watching me with smirks on their faces. Ignoring them, I asked the clerk whether he had vanilla ice cream. He replied that he did. 'You can sell a colored person a pint of ice cream, can't you?' I asked sarcastically. 'Yes,' he answered. 'Well, give me a pint of vanilla, and you do have wooden spoons?' Again an affirmative reply. 'Then please put two of them in the bag with the ice cream!' He did so. I left the store, carrying my supper with me. Lonely and angry, I retraced my steps to the university. It was my first experience with racism in Jefferson City.

As I ate the ice cream in my dorm room, I looked out of the window. I was unaccustomed to the treatment I had just received. My hunger had left me. I was hurt and sad. All I could do was cry. Disillusioned and dejected, I decided that upon receiving my first paycheck, I would return to New York where the National Urban League had a housing job awaiting me, contingent upon a grant from Washington.

But events of the next few days changed my mind. The president, administrators, faculty members, and students began arriving, and the academic wheels started to turn. When classes began, I realized that my services were needed here. Lincoln had an excellent faculty, drawn from such prestigious universities as Harvard, Columbia, Chicago, Boston, New York, Pittsburgh, Cornell and others. A group of us planned to make Lincoln an academic replica of Amherst. Student enrollment ranged between 300 and 350. We had the pick of black students from

> Missouri, Arkansas, Oklahoma, and other nearby states. Others came from as far away as California and Massachusetts. Many had excellent potential, but had been victimized by inferior, segregated schools. Soon, under a group of dedicated teachers, Lincoln was turning out students, many of whom enrolled for higher degrees in the best universities in the nation. Others entered the professions, especially as teachers. I had found my life's work and loved it (L. Greene, 1980, p. 1-3).

Although this writer is only able to experience this story from the print, the writer certainly understands how the black educators at Lincoln University could feel they were involved in a missionary effort. This event occurred a scant nine years prior to Dr. Fuller's arrival at Lincoln University. The commitment to quality pupil guidance against all obstacles seemed to also guide Dr. Fuller in his efforts to teach and administer at the Department of Fine Arts at Lincoln University for over thirty years.

# CHAPTER IV

## DR. OSCAR ANDERSON FULLER

> A third generation teacher, now Professor Emeritus of Music at Lincoln University and a creative force and effective leader in Missouri for more than 30 years, received his Bachelor's Degree in Music from Bishop College and studied at the New England Conservatory before receiving his Master's and Doctor's Degrees from the University of Iowa. He was the first Black American to earn a Ph.D. in Music (Tape Ten, 1982).

This quote was part of the presentation ceremonies during which Dr. Oscar Anderson Fuller received the Pioneers in Education for the State of Missouri award. This prestigious award was presented to him in the summer of 1981, symbolizing recognition and gratitude for his unique service to Missouri. The award presentation culminated with this spoken tribute, "his talent, his commitment and his willingness to serve have made him a real Pioneer in Missouri Education."

The following chronology provides a sequential career perspective relevant to Dr. Fuller's educational and teaching record prior to his work at Lincoln University.

| | |
|---|---|
| 1924-1929 | Music Department Chairman of North Carolina Agricultural and Technical University |
| 1929-1942 | Music Department Chairman of Prairie View State University |
| 1933-1934 | Master of Arts degree from the University of Iowa |
| 1940-1942 | Doctor of Philosophy degree from the University of Iowa |
| 1942-1974 | Music Department Chairman of Lincoln University (Tape Nine, 1982). |

The first part of this narrative will trace the educational path which Dr. Fuller pursued to obtain his Doctor of Philosophy degree followed by a resume of the course work that he experienced. This chapter is a synthesis of many hours of taped interviews with Dr. Fuller. Verification of the information in this chapter in regard to his work at Lincoln University has been witnessed by Mr. Laurence Kimbrough and Mr. Marshall Penn. Professor Kimbrough has been at Lincoln since 1949 and Professor Penn has been at Lincoln since 1947. Both professors have read this chapter and confirm the validity of the Lincoln University information as given by Dr. Fuller. This section will then be followed by an account of his teaching experiences before arriving at Lincoln University.

Dr. Oscar Anderson Fuller was born in Roanoke, Virginia, on September 20, 1904. His family is from the Hampton-Roanoke, Virginia area. As Dr. Fuller tells the family story:

> My Father and his brother left home and went to Washington, D.C., then to Boston. So they said, 'one of us has got to have some sense and one of us has got to have some money,' so that summer they got to Boston. It must have been 1890. They both got a job at the Parker House which is a venerable, highly respected hotel. So my Father, Oscar Anderson Fuller, Sr., enrolled at Harvard and worked weekends, nights, days and when he could (Tape Two, 1979).

A somewhat extraordinary element of distinction in Dr. Fuller's father's family was that out of six brothers and one sister, all the brothers earned doctorate degrees. The sister earned her master's degree from Columbia.

Dr. Fuller's father's academic advisor subsequently encouraged him to go to Bates College, located in Lewiston, Maine, because he could devote full time to his studies and he would no longer have to work. He did go to Bates, graduated, eventually earned his M.A. from the University of Chicago, and later his Doctor of Theology degree from Union University of Virginia. He later became Dean of Bishop College, located in Marshall, Texas.

Consequently, Dr. Fuller's childhood and youth were influenced in and by the higher education environment. While his father was Dean at Bishop College, Dr. Fuller earned his undergraduate degree there. His decision to stay at Bishop College was based in part on his relationship with a music instructor at Bishop College, Dr. John Albert Talcott, whom Dr. Fuller respected and admired both as a teacher and as a person. The Bishop College undergraduate years seem to have been very enjoyable years for Dr. Fuller. Bishop College, as many other black insitutions of this time, were socially close in their student-faculty relationships.

> They had a very good faculty, a small faculty and they [the administration] preferred having all people live on campus. I stayed there [for his undergraduate work] primarily because of Dr. John Albert Talcott, who was a Canadian. I think the little salary they paid him [Talcott] just didn't support his fancies. He didn't need it [the money]. He left in 1918 and served in World War I, came back decorated and at the rank of Captain. He had a car hand made for himself, because he had known the liberty motor was such an outstanding device. He built a beautiful fifteen rank organ in his home. He was just that type of a romanticist and so he and I were very good friends as well as being my teacher (Tape Two, 1979).

The degree earned by Dr. Fuller while under the friendly tutelage of Dr. Talcott was a Bachelor of Arts. He explains, "But I had to take a Bachelor of Arts program because they didn't give a Bachelor of Music program--it was the equivalent but they worked you harder I think than the other."

After graduating from Bishop, Dr. Fuller attended the New England Conservatory just "to better himself" (Tape Nine, 1982). He had known students who had attended the conservatory and they gave him positive comments about the conservatory. While at the New England Conservatory, Dr. Fuller studied theory and composition with Dr. Benjamin Cutter on a one-to-one basis. Dr. Benjamin Cutter was Professor of Theory and Composition at the New England Conservatory of Music. It was at this time that he learned of Dr. Phillip Greeley Clapp. Dr. Phillip Greeley Clapp was regarded as a prodigy on piano. He earned his degrees at Harvard and after extensive traveling and teaching, he went to the University of Iowa c. 1922 to organize and administer the music program. Dr. Clapp was the nephew of Horace Greeley. Dr. Clapp had been at Dartmouth, Harvard, Vienna University and then came back to the United States. When he came back, he went to the University of Iowa and people wondered why in the world would you go to a wilderness in,

> . . . the Midwest and he used to laugh and say, 'the Easterners are ridiculing me for coming West. I had to adhere to the wisdom of my uncle [Horace Greeley] to go West young man. And when I got to the West it was such a challenge and such a virgin field that it made the people in New England look like they were standing up dead and didn't have sense to lie down' (Tape Nine, 1982).

Dr. Frederick Shepherd Converse and President George W. Chadwick, both of the New England Conservatory, encouraged Dr. Fuller to go to Iowa for his master's degree and the opportunity to work with Dr. Clapp. (George W. Chadwick was past President of the New England Conservatory of Music. Dr. Frederick Shepherd Converse was a composer and teacher at the New England Conservatory of Music [born 1871-d. 1940]

[The New College Encyclopedia of Music. (New York: Norton, 1960)]). While studying at Iowa, Dr. Clapp encouraged and convinced Dr. Fuller to return subsequently to earn his doctoral degree.

Dr. Fuller's Dean at Iowa was the psychologist, Dr. Carl Emil Seashore.

> I went to Dean Seashore, who was really the father of the psychology of music. He was our Graduate Dean and I was receiving my Ph.D. He would have a conference with you before he approved you. The committee had to approve you, but then he had to approve you, so he says 'come in and let's have a talk' and he asks, 'what are you going to do?' I said I intend to return to my position [at Prairie View]. But I didn't. Lincoln got me. I received my Ph.D. in July and a day and a half later Mommy [Mrs. Fuller] and I and our pet were on our way to Jefferson City (Tape Two, 1979).

The above information and recollections derived largely through taped interview illustrates segments of the educational path which Dr. Fuller followed to earn his Doctor of Philosophy degree. The following material integrates additional facets relevant to the master and doctoral work that he completed at the University of Iowa and some of the concomitant professional experiences in teaching and administration in parallel chronology.

Dr. Fuller earned his Master of Arts degree in the 1933-34 academic year. His team piano teachers were Dr. Harry Thatcher and Dr. Clapp. Dr. Fuller's courses included music history, music theory, performance and ensemble classes. The ensemble classes consisted of university chorus and symphonic choir. As a student scholarship worker he served as a piano accompanist and for two semesters wrote radio programs for the university radio station. The programs consisted of works featuring Negro composers. The radio programs were a mixture of solo and group performances. After 1934 he returned to Iowa in 1940 to begin his doctoral work. The emphasis in his doctoral work was composition (Tape Nine, 1983).

Dr. Fuller's dissertation composition was "The Creation," an oratorio for 12 part symphonic-mixed chorus (unaccompanied) and baritone solo. His course work included piano study, accompanying and a substantial amount of composition work.

An unfortunate circumstance relative to his compositional efforts is that all of his compositional work was lost in a major Jefferson City flood (Tape Nine, 1983). Although Mrs. Fuller, on several occasions had urged him to seek a publisher for his material, Dr. Fuller never fully pursued this matter. As a result, his entire compositional products were stored in the basement of his home in Jefferson City. At that time duplicating equipment was not developed and copies had not been made, thus Dr. Fuller's compositions were destroyed in the 1946 flood that devastated the general area where the Fuller's home was located. His compositional career seemed to be adversely affected by this act of nature. He was never again to write at the level shown on his doctoral dissertation composition listing.

In the summer of 1924, Dr. Fuller worked in Washington, D.C. He had been accepted to the medical school of Howard University and he arrived early to obtain employment and to enjoy the Washington, D.C. area. During the summer he was told of a faculty music vacancy at the North Carolina Agricultural and Technical

University. He applied and was offered the position. Thus, he accepted the music position and relinquished his opportunity to enter the medical school.

Dr. Fuller's duties at the university included directing the choir and band. He also taught music appreciation, elementary music, athletics, anatomy and physiology. A special feature of his work at this institution was his development of a small traveling vocal ensemble. He particularly enjoyed this work and his success at touring was to be a characteristic of his career, regardless of the place of his employment (Tape Three, 1979).

Dr. Fuller's ability to work effectively in group situations became evident during his work at North Carolina. He was able to successfully transmit his thorough preparation and his choral ensemble sound concepts to produce an unusually high performance level. Dr. Fuller considered the touring musical ensemble to be a significant part of any higher education music program. The word "showcase" was a significant word to him which meant that any music school program should have quality performing groups ready and willing to demonstrate by performance the teaching strengths of their institutions of higher education.

During the spring of 1929 Dr. Fuller believed that he had developed the music program at North Carolina to the level desired by the institution. He believed that North Carolina Agricultural and Technical University, at this time, was not prepared to support and develop the music program to a greater degree than then currently in existence. Dr. Fuller began looking for other employment opportunities.

During the summer of 1929 Dr. Fuller

chose to leave North Carolina and go to Prairie View State University. Concomitantly with his work at Prairie View, he earned his Master of Arts and the Doctor of Philosophy degrees at the University of Iowa. At Prairie View Dr. Fuller taught theory, piano, voice, music literature and directed the choir. He was also responsible for the music departmental administrative assignment (Tape Three, 1979).

Between 1929-1942 at Prairie View, Dr. Fuller studied at Iowa several summers and during the academic years when leave from Prairie View was permitted. At the University of Iowa blacks were not allowed to live on campus. In order to assist blacks attending the university, several Iowa black leaders bought a large home near the campus to serve as a dormitory for some of the black students. Mrs. Fuller was asked to be the matron head of this dormitory. This fortuitously assisted Dr. Fuller's efforts to study at Iowa and to remain financially solvent (Tape Eight, 1979). Mrs. Fuller was consistently supportive of his educational efforts. Her advice, support and financial contributions greatly assisted in his academic pursuits as well as in their life together as joint partners in the familial venture.

Throughout these years of teaching and study, Dr. Clapp was a guiding and sympathetic advisor. At one point when Iowa asked Dr. Fuller to stay on campus while Prairie View was vying for his return to Prairie View, Dr. Clapp's counsel assisted Dr. Fuller in successfully meeting both obligations. Dr. Clapp advised him to return to his work at Prairie View, but when scheduling breaks occurred, to come back to the University of Iowa campus and "be seen." Thus, he was able to meet both obligations and residency requirements (Tape Two, 1979).

Dr. Fuller speaks with obvious warmth and regard for the institution of Prairie View State University. Prairie View was a student and faculty family oriented college. The president of the institution asked the spouses of all faculty members attend the monthly senate meetings. The reason given was that the spouses should know from primary source what the university was doing. On occasion the spouses would give suggestions, but were nonvoting participants in the structure of the university. All faculty homes were on campus and these residences were provided by the Univesity (Tape Eight, 1982).

As doctoral graduation time approached, Dr. Fuller had many teaching offers. Two Lincoln University faculty members were also working on their doctoral degrees at Iowa. Dr. Milton Hardiman, foreign language, and Mr. James D. Parks, art, told Lincoln University President Sherman Scruggs about Dr. Fuller and his work at Iowa (Tape Two, 1979). Lincoln asked Dr. Fuller to come for an interview.

> And so I came here. I had them [other college offers] when I came here [Lincoln] for the interview. I had a letter and a check in my pocket to move to another institution [Dillard University] and I wasn't thinking of accepting [Lincoln's offer.] I liked it [Lincoln University] and I went back and told Mama [Mrs. Fuller]. She said, 'We can go anywhere for a year to two because for a little while you are going to continue to get offers.' I am not one who runs around, you know, from pillar to post, so I said, 'let's see if we can do something' [for Lincoln's program].

After making the decision that he wanted to work for Lincoln, Dr. Fuller went to Missouri for a final interview:

> Mr. Parks and I drove down from Iowa City for the [final] interview and I said, 'yes, provided if things are as favorable as they seem to me. Also, if you [Dr. Scruggs] as the chief administrator, who has a great deal to do with the action of the Board of Curators and with your ability to sell the program . . . if you would do this: If you would allow me, if possible, to organize the study of music as a major discipline.' And he [Dr. Scruggs] said, 'I am very fond of music and I expect you to know what should be done and at what cost. I don't know how to do it, that is why we were so very interested in you.' So that sounded good enough and that was the beginning of Lincoln's Department of Music.

The music program at Lincoln prior to Dr. Fuller's arrival was essentially just a supportive program for the other university disciplines. The program did not offer any degrees in music. So with the support and charge from President Scruggs that music at Lincoln should be developed into a major discipline, Dr. Fuller began his work (Tape Four, 1980).

"So that's the way it was started. I was almost a crank, for everything had to go towards better instruction and [for] encouragement of students who had a bent for music." World War II was entering a time of extreme crisis. During 1942-43, Lincoln paid a substantial price in that most of the male students had to leave the campus to serve in the war. Dr. Fuller recalls that,

> When you [a male student] came to Lincoln you registered for courses and also if you had not registered in the draft, you registered in the draft at Lincoln, subject to removal

> at any time. Things [the war] got worse and these fellows were in the enlisted reserve corps--that's what it was--ERC. I stood on that campus in the old Memorial Hall with a lump in my throat about the size of an egg to see 160 men walk out of Lincoln, at one time. The choir we had was reduced. I guess maybe, we had sixty or seventy women and about seven men. Just holding things together, but they came back. We had some heroes from here (Tape Four, 1980).

Dr. Scruggs was concerned about losing Dr. Fuller to the war effort so he decided to see if Dr. Fuller could serve the war effort from Lincoln's campus. The draft board for Dr. Fuller was located in Texas, so Dr. Scruggs took Dr. Fuller to Texas and made the following appeal on his behalf.

> This war isn't going to last--even the 100 Years War ended. We have some key people on our staff that I would like to keep close to me and close to Lincoln. Now how can we do it? This is not the request of this young man, because I think he has an admirable spirit for giving his best to his country, so I'm intervening (Tape Two, 1979).

The Texas draft board approved the appeal and ordered Dr. Fuller to be part of the United States Armed Forces Special Services while at Lincoln University. The special services unit was primarily the public relations arm of the armed services. The primary functions included musical events, armed service literature dissemination, tactical demonstrations and other public service functions. Dr. Fuller's work was in the music area of the special services (Tape One, 1979).

Dr. Fuller had a prior history of serving the armed services. At North Carolina Agricultural and Technical University, he was commissioned a Lieutenant. He was in charge of the bands and the parade ceremonies from 1924 to 1929. While at Prairie View he was Captain in charge of bands from 1929 to 1937 (Tape Three, 1979). After his war effort in the Missouri special services, he was commissioned Honorable Lifetime Colonel of the Battalions (Tape Two, 1979).

A large part of Dr. Fuller's war service was the visiting of army camps. He and his Lincoln University musical groups presented special and seasonal music programs. These visitations, especially at Ft. Leonard Wood, continued for many years after the war. Dr. Fuller notes that the Lincoln music groups "inspired the families at Ft. Leonard Wood to form their own oratorical chorus."

The student population of Lincoln prior to the war effort was about 600 students. As the armed services needed all the able bodied people, Lincoln's student population was reduced by at least one-third of its earlier enrollment. However, due to the separate but equal premise that was a part of the country's educational system before 1954, the higher education students were not the only students at Lincoln. Secondary level students were also taught by several of Lincoln's music faculty who were responsible for the musical needs of the high school for blacks which was located on Lincoln's campus (Tape Five, 1981).

The students had to travel for miles each day in their efforts to continue their education.

From Auxvasse and all the outlying territory

> they came, and I had the opportunity and St. Anthony gave me the presence of mind to say, when someone of non-black vintage was fussing about busing students: 'Well, I've given it some thought and I'm not as close to it as maybe I should be, but I have a memory and I know the time when buses out of Mexico, Missouri used to come down [to Lincoln] and I bet they passed a half dozen accredited high schools. If they could bus students to keep them from being in an integrated situation, you could bus them to put them in an integrated situation.

St. Louis and Kansas City were the principal sources for students for Lincoln University. Usually about 200 to 250 students would come to the Lincoln campus from these two cities each year. The music offerings for these students extended to band, choir, applied lessons and basic music courses. The faculty was also responsible for the high school. "We had a band teacher, Pope Benjamin, who did all, I mean he did all of the band and teaching of instruments. We had a strings teacher who taught and supervised music in the high school music program." The high school on campus greatly assisted Lincoln in becoming accredited by the state of Missouri for the training of music teachers. Blacks were not allowed to student teach at white schools. The high school,

> . . . had its own principal and he accepted Mrs. Harris [Lincoln faculty member] as the teacher of music and after we began music education she was the supervisor of practice-directed teaching. Mrs. Harris was attached to both the university and the high school. So we had three and one-half teachers (Tape Five, 1981).

At the time of Dr. Fuller's arrival in 1942 there were not music degree programs, few faculty members and the war effort had a deleterious effect on Lincoln's enrollment, and although the music faculty was numerically small, Dr. Fuller worked toward his educational goals. A degree program in music and proper accreditation were two of his immediate concerns.

"The difficulty in acquiring accreditation convinced the [Lincoln] university general academic faculty that it would not be giving up [power] in allowing a music major degree." This critical juncture in Dr. Fuller's efforts was greatly ameliorated by having the support of the administration. The reader shall recall that this support was one of the primary concerns raised by Dr. Fuller in his interview before his arrival at Lincoln. The administration did follow through on its commitment made at the time of the hiring of Dr. Fuller that they wanted and expected music to become a major discipline at Lincoln University. Thus, with the needed administrative support the faculty in the spring of 1943 approved the music degree program (Tape Five, 1981). Lincoln's Department of Music welcomed freshmen into the major degree program in the 1943-44 academic year. Considering the drain in the student population due to World War II and the draft board's special services requirements made upon Dr. Fuller, the support of the administration was a critical element in Dr. Fuller's efforts to develop the music program at Lincoln.

The next developmental step sought was accreditation by the National Association of the Schools of Music (NASM). Dr. Fuller was intent upon building a quality program for the students and to enhance the level of Lincoln's presentation before the NASM review committees. One step, perhaps unique to Lincoln, was the establishment of weekly studio meetings and weekly seminar meetings. The idea for the seminar meetings came from Prairie View. The idea for the studio meetings came from the University of Iowa. Dr. Fuller built these concepts into a workable and productive curricular format.

The format of the studio class was for the majors of a particular music study, such as voice, to meet with the voice teacher for one weekly study period. The voice teacher used this time for addressing common vocal concerns, performance preparation and presenting lecture-demonstrations relevant to all voice majors.

The format of the seminar class was for all music majors and faculty to meet weekly. The purpose was to address concerns of all music majors and to give performance opportunities for the students. The students were required to perform two times each semester in seminar class. If the teacher properly prepared the student for these seminar experiences throughout the students' undergraduate experience, the junior recital (optional) and the senior recital (required) performance should merely be a holistic presentation of what has occurred during the student's seminar experiences.

The writer has completed his fifth year of teaching at Lincoln. In the writer's opinion after witnessing the weekly studio-seminar concept for five years, this innovative process originated by Dr. Fuller still has a significant impact on the students and the faculty. From the faculty evaluation perspective an administrator (as well as faculty peers and students) can determine which faculty members are consistently effective in their applied music lessons. One can see which students are prepared and feel confident about their musical presentations. From the student's perspective, the student can see and hear what is, and will be expected of their musical growth. The older students take their guidance responsibilities seriously. Generally as the academic year progresses, a positive atmosphere develops whereby students help one another to grow. It has been the writer's experience to witness some truly exceptional performances during these weekly seminars.

The opportunity for the entire faculty and students to meet during these weekly seminars has also provided the opportunity to invite guest educators and musicians to lecture and perform before our students. Concerns of students and faculty have also been addressed during these seminar meetings. Instead of a student or faculty member listening to misinformation, the chairman is able to inform and to regularly listen to student concerns. One of the greatest educational and musical joys for faculty is the privilege of being able to assess the growth of the freshman who enters with modest musical training. The entire music department is able to watch as this student develops in ability and confidence.

Survey responses confirm alumni recollections voiced in typical conversations about the seminar programs held at Lincoln. As Mrs. Ruth Hatcher (1966) stated in her questionnaire response: "I remember the many fine student seminars." Mrs. Rose Dryden Palmer (1948) noted: "the weekly seminars made us shaky sometimes but it was good training. We had to rehearse, work hard, so we would have good performances when our time came [to perform]." Mrs. Nadine Brown Wallace (1958) stated, "the opportunities to perform gave us invaluable experience that has had value in my profession." (Questionnaire Results, Appendix.)

Dr. Fuller's continuing effort to offer quality education to the students included requiring the music majors to take more music courses than the accrediting agencies required. One semester of percussion at many state schools contrasts with two semesters of study at Lincoln. More piano instruction was required at Lincoln than the state required. Form and analysis courses were added to the already full music education course of study (Tape Five, 1981).

Dr. Fuller began attending the National Association of the Schools of Music national meetings, as an observer, in 1943-44. The yearly NASM national meetings generally consisted of the review of school applications, school renewal applications, and possible revisions in the accrediting procedures. After attending these meetings for five years, Dr. Fuller prepared the Lincoln program to conform to the NASM guidelines (Tape Two, 1979).

In 1948, Dr. Fuller invited a NASM review committee to come to Lincoln University. The personnel in the review committee were: Dr. Earl Moore, Dean at Michigan; Dr. James Quarles, Music Chairman of the University of Missouri; and Donald Swarthout, Dean of Fine Arts of the University of Kansas. The report on Lincoln was favorable. The committee noted that Lincoln was making a significant educational progress. In 1949, Dr. Fuller made a formal application for accreditation. Then in 1950 NASM approved the application of Lincoln University. (See the acknowledgement of being accepted by NASM in Appendix.) The Department of Music at Lincoln became only the second school of a black constituency to belong to NASM. This external acknowledgment of the achievements of Dr. Fuller is strong testimony, alone, regarding the quality of the effort and success of his work (Tape Two, 1979).

Following Dr. Fuller's arrival at Lincoln in 1942, real improvements occurred in the music department. A student could obtain a major in applied music or music education. Certification and accreditation were approved by the State of Missouri and by NASM. Dr. Fuller developed the music program to the point whereby an entering freshman could prepare for a fully recognized performance degree and career in the applied music program or the student could enter the certified teacher music education program with promise of a professional teaching career in elementary and secondary schools. The pending accreditation of the Music Therapy program is detailed in the next section because of the relationship and direct reaction to the 1954 Supreme Court decision to end the formal segregation practices in America.

Although Dr. Fuller stated that little good would come by returning to the state of black American life before 1954, in fact, many of the immediate changes adversely affected black teachers. Now that segregation in the schools had been formally ordered to end, Lincoln experienced a decline in enrollment from the traditional recruiting areas of St. Louis and Kansas City. Students of higher academic ranking were being recruited away from the traditional black educational experiences (Tape Six, 1981).

Black students from court ordered integrated high schools subsequently enrolling at Lincoln were not as musically prepared. The black high school student usually did not feel welcomed into the white musical experiences. In Dr. Fuller's view there were definitely more opportunities for quality high school black artistic growth and development before 1954.

Role models of black music teachers disappeared in the years immediately after 1954.

When black and white high schools were ordered to integrate, the resulting consolidation eliminated the positions of many black music teachers.

The black teachers competing for jobs found themselves in competition with other blacks for the same position. The black teachers generally were not considered for all available teaching positions. This was a depressing time for Dr. Fuller because he witnessed fine music teachers losing their positions and being demoted because of the integration of school facilities. He realized that his music education undergraduates were being prepared for greatly diminished career field opportunities.

A positive aspect for Lincoln's music department was that at least in the 1950s and early 1960s more whites were becoming participants in the Lincoln music offerings. Another positive aspect for Missouri black high school students was increased accessibility to current educational materials. In his travels to Missouri black high schools before 1954, Dr. Fuller saw students using "hand-me-down" textbooks and equipment. Torn, damaged and out-of-date textbooks and materials were distributed to the black schools after the white schools no longer had need or could use the materials.

Two final positive benefits were the flowering of an already developed summer music program and the development of the Music Therapy program. Dr. Fuller had developed, since 1945, a steady communication of academic plans with the State of Missouri teacher education program. This communication resulted in authorization to offer required courses for public school teachers in the summer months. The fact that this summer program had already been developed meant that after 1954 the courses were available for all teachers who wished to take this educational opportunity (Tape Four, 1980).

In retrospection, it now seems that the summer music program for high school students provided an excellent cultural enrichment access. Many of the summer music camps that have been developed at Missouri colleges in the last ten to twenty years were already in practice at Lincoln. Students from a seven state area came to Lincoln for several weeks and lived on campus. The students daily studied strings, keyboard, voice, winds and theory courses. Outdoor concerts were programmed on the weekends. The personnel consisted of high school students, Lincoln undergraduate music camp advisors, community people and selected summer Lincoln music faculty. At least one noted clinician was brought in for these summer camps.

Unfortunately this educational, public relations and recruitment process was dissolved in the late 1960s because of Lincoln University's administrative financial concerns. At about the time other Missouri schools were developing their summer programs, Lincoln was ending support of their summer music opportunities.

The immediate effort to find a solution to the summer financial need was to apply for summer funding to the Missouri Arts Council. The Council did respond in a limited manner for several summers. The limited response was for instructional funding. No funding was located for housing students. Thus, only the students from the Jefferson City area continued to attend Lincoln's summer music program. Still later, the early 1970s saw revised Missouri Arts Council guidelines that resulted in no funding from the Council. The summer program which reached quality standards had now been completely eliminated.

The summer music program was an important recruiting tool for the music department. The summer music program's demise adversely affected the student music enrollment at Lincoln. At one time, students from seven states were being introduced to Lincoln every summer. Unfortunately, Lincoln's Department of Fine Arts now has little opportunity to reach these areas. However, in the 1950s the summer program was a viable part of the music program.

Another major concern in the 1950s for Dr. Fuller was how to broaden the job market for his students. As a result of the limited employment opportunities caused by the 1954 Supreme Court decision, Dr. Fuller decided that the music department should develop an undergraduate music therapy degree program. The implementation of the decision to expand Lincoln's program followed many hours of debate (Tape Five, 1981). In addition, there had developed various requests for Lincoln to begin offering a Master of Music Education program. The requests came from the administration and from the community public school teachers.

Eventually, there were two factors that had impact on the undergraduate music therapy program. The first factor was the depressing fact that since 1954 blacks were experiencing considerable frustration in locating school districts which were hiring black music teachers. The second factor was the administration's unwillingness to commit the necessary funding for the increase in faculty and faculty upgrading for the master's program (Tape Six, 1981).

The third degree program, Music Therapy, began in 1956. The certified music therapy program was designed to place people in mental health institutions. At the time of the beginning of Lincoln's program, administrators of mental health facilities were recognizing the effectiveness of music in communicating with their patients. Not only were Lincoln's graduating music therapy students able to find employment, in addition, the rapid upward mobility to administrative work was an unforeseen advantage for the Lincoln music therapy graduate. All of Lincoln's music therapy graduates were afforded the opportunity to advance, if they chose to accept, to more financially rewarding administrative positions (Tape Six, 1981). Dr. Fuller was correct in predicting this would be a good job area for Lincoln graduates.

Throughout the period of Dr. Fuller's administrative tenure and his efforts to improve the quality of the music department, the Lincoln University choir was a consistent public relations arm of the university and often taken on tour. He had begun the directed choirs and choir tours at his two previous positions and thus was well prepared and experienced for this thrust at Lincoln. The format usually consisted of three program parts. The first consisted of solo and choral literature from the usual choral repertoire. The second part consisted of opera scenes with costumes and lectures provided by Dr. Fuller. The third part of the program consisted of a variety of pleasing music commensurate with the wishes of the particular audience for which the choir was performing (Tape One, 1979).

The annual spring choir tour reached such successful proportions that the choir tour was funded entirely by the churches and other sponsors. This financial success permitted the university allotted music organizations' travel funds to be assigned to the band.

The educational value of going on tour four or five times in an undergraduate experience may be supported by the fact that several students became involved in professional singing following academic and professional training at Lincoln under Dr. Fuller's guidance. Phelicia Weathers, American-European opera performer was a former student at Lincoln. She was a winner of one of the regional Metropolitan Opera auditions. This audition was judged by San Francisco Opera Conductor Curt Adler. During the early 1970s, there was an innovative singing group called The Fifth Dimension. Two members of this group attended Lincoln. Dr. Fuller was not only the conductor, organizer and lecturer of the tours, but when needed, was also the pianist.

Many of the awards that were presented to Dr. Fuller came as a result of his yearly choir tours and special choir performances. (See Appendix, Awards Listing.) The Luther Spade Choral Conductor's Guild of America (Missouri chapter), Lincoln University Detroit Alumni Award, Music Educator's National Conference Award and the Distinguished Community Service to the City of St. Louis Award are direct results of his choir performances. The Olaf Christiansen Award was presented to Dr. Fuller in 1946 for his study and work at the Christiansen choral school.

The effectiveness of Dr. Fuller's choral work was of an uncommonly high quality. Prof. Marshall Penn, faculty member, stated "he [Dr. Fuller] had a great talent for spotting and selecting talented musicians who would work smoothly and harmoniously together." (Tape Eleven, 1982). Mr. Alfred W. Bleckschmidt, retired Supervisor of Music for the State of Missouri spoke warmly and eloquently concerning the exceptional performances he witnessed (Tape Twelve, 1982).

Alumnus Mr. Henry Walker West noted,

> The Concert Choir and the yearly travel with the choir was a major part of my stay at Lincoln. I heard Bach's "Christmas Oratorio" on television this past Christmas (1981) and I remembered well the work that went into our production of the same, at Lincoln. To be given the tenor role from this oratorio was and has been important in my life. (See Appendix, Questionnaire Results.)

Alumna Mrs. Palmer's remarks on Dr. Fuller's choral work seem appropriate to close this section on Dr. Fuller's choral work: "I never met another instructor in all my thirty-one years of teaching with as much patience and the ability in his way of pulling out the best in you."

A positive and quite successful collaboration occurred during the early 1960s between Stephens College and Lincoln University. Stephens College was an affluent women's college, located in Columbia, Missouri. Stephens music faculty was fully cognizant of the quality choral program in existence at Lincoln. When the yearly full-scale opera productions were presented, the Lincoln male choral students participated as contributory complement to the opera productions.

The music students who went to Stephens College to sing were prepared by Dr. Fuller. Dr. Fuller's careful preparation in his choral work exemplified his many years of successful choral directing. Dr. Fuller believed in allowing the students to be responsible for many of the choral activities and routine administrative departmental functions. Until the university provided a secretary for the department, students were responsible for much of the daily office duties in the music department. The choral activities usually had two to three student conductors and two to three pianists. During choral rehearsals the student conductors were responsible for the warm-up process and when Dr. Fuller was absent the choir still rehearsed with the student conductors. During one lengthy illness sustained by Dr. Fuller, the choir still prepared for tour and other performances (Tape Six, 1981).

An especially effective choral teaching method utilized by Dr. Fuller was the use of small prepared ensembles such as duets, trios and quartets which were used as examples to teach choral literature to the larger choral ensemble. He gives considerable credit to this vocal model teaching method for the quality achievements of the choir. When the choir saw their peers singing in a unified, balanced musical manner, the choir members worked even more diligently to achieve the same standards. A somewhat parallel kind of preparation and careful consideration also was devoted to hiring of faculty members.

When hiring faculty members, two considerations very important in the interview process were versatility and student rapport. Dr. Fuller observed various criteria which he stressed when going over prospective faculty credentials, but the above-mentiond considerations were paramount. The candidate needed to possess a high degree of proficiency in a major area, with a strong support area. Dr. Fuller sought people who he felt would contribute not only to the music unit but to the university community as well. The candidate should possess evidence of being able to develop a rapport with his peers and with his students. Dr. Fuller sought for faculty with ideas and for those who would become involved at the local, state and national levels of the music profession.

Dr. Fuller sought aggressive potential faculty members, but not those who displayed a temperamental nature. He felt that the aggressive candidate would be more apt to promote music and to promote the university. The candidate should show evidence of desiring to continue his educational perspective and above all to be personable and to be a concerned person--"a humanitarian." Although not mentioned by Dr. Fuller, stability seems to have been a factor he gained in faculty recruitment. At the time of his retirement, only one faculty member had been in the music department for less than five years.

During Dr. Fuller's work at Lincoln, the school was honored to be the first school to have a state financed fine arts center. While Lincoln certainly needed a center, so did other state institutions. His effective verbal persuasiveness and plans led to the needed Lincoln University administrative support and legislative approval of this center (Tape Five, 1981). The administrative support, led by President Scruggs, was marked by a circumspect approach to the legislature from the viewpoint that Jefferson City and Lincoln needed an auditorium. The fine arts wing was presented as a relatively minor part of the auditorium. The real goal of Dr. Fuller and President Scruggs was to have a fine arts facility; however, they believed that funding would be less likely to receive legislative approval by placing emphasis on the fine arts wing in their budget proposal. Testimony to the wisdom of their planning became evident as the legislature subsequently did give its support to the auditorium and the fine arts wing (Laws of Missouri, 1949, p. 213). The facility consists of a 1,500-seat formed concrete auditorium connected to a quite utilitarian three-story fine arts wing. The first and second floors now quarter the music department and the third floor serves the art department. The music area has one class piano room, one large ensemble rehearsal room, one class room, seven teaching studios and eleven practice rooms (Tape Five, 1981).

This structure has proven to be a well-designed and adequate structure. Many of Dr. Fuller's plans had to be modified to fit into the final allotted funding; however, the finished structure retains the spirit and practicality of his conception. The center is used by college and community and is a center for many stage productions, meetings and music presentations.

Dr. Fuller, as will be noted in the appendix listing of his awards, was active in many music and non-music areas. He is still a member of the North Central Accreditation Board and sits on several local and state boards, including the Missouri Council on the Arts and St. Mary's Hospital (Jefferson City).

The teaching effectiveness of Dr. Fuller led to his selection by retired State Supervisor of Music, Mr. Bleckschmidt, to be on the Curriculum Planning committee for the only music curriculum guide to be published by the State of Missouri. The Music for the Schools of Missouri Curriculum Guide, 126 G, 1963, was published under Commissioner of Education Hubert Wheeler's appointment. Mr. Bleckschmidt stated that Fuller's contributions were invaluable to the completed work. His "philosophical insights would cause the curriculum committee to view specific curriculum objectives in an entirely different manner" than their former planned course of action (Tape Twelve, 1982).

Mr. Bleckschmidt, upon Dr. Fuller's invitation, conducted many in-class workshops at Lincoln for the students and faculty. Mr.

Bleckschmidt noted he was "always impressed" by the student body and faculty that were under Fuller's administration.

Prof. Penn, in regard to Fuller's teaching effectiveness stated he (Dr. Fuller) had the unique ability to have "black and white students working together" on shared musical goals (Tape Eleven, 1982). Prof. Penn stated that Fuller's "excellent preparation from his large collection of personal books on music" were evident in his public speaking opportunities. Whether Fuller was speaking in a choral rehearsal or to choral concert audiences, his timing and scholarly delivery was always a quality effort. Professor Penn continues "that the students all knew that they were not necessarily being prepared for teaching immediately after their undergraduate experience. They [the students] were all expected to go on to graduate school." The students were not only expected to continue their music study but to contribute to the art of music in whatever way they could.

Professor Harrison of the University of Missouri observed,

> It was certainly evident that Dr. Fuller constantly strived to see that students at Lincoln University had the best opportunities possible to achieve high quality training. I became very aware of this from being on the campus several times to meet with the students enrolled in music education classes as well as to engage in curriculum planning with Dr. Fuller and his staff (See Appendix, Questionnaire Results).

Alumna Mrs. Wallace effectivey states, "I try to give my students the love for music that Dr. Fuller helped develop in me. He and his colleagues made them [goals] all seem attainable."

Administratively, Lincoln University Dean of Arts and Sciences, Dr. Thomas Pawley, stated Dr. Fuller "always completed the university administrative work" (Tape Eight, 1982).

Professor Emeritus Dr. Armistead Scott Pride noted his,

> . . . professional relationships with Dr. Fuller over a period of thirty-three years were always of a high order, exacting, yet friendly. He concentrated his inexhaustible energies and administrative skills on the development of the Department of Music and gave it the leadership that gained for the university, departmental accreditation for its music offerings (See Appendix, Questionnaire Results).

Professor Emeritus, Dr. Milton G. Hardiman notes,

> I was always under the impression that he could have handled many positions of higher academic status. His crisp speech and clear thinking always brought a seriousness to the subjects under discussion. His apt grasp of discussions and debate held the keen attention of his co-workers. He was a serious and dedicated musician of high order.

Penn states that "Dr. Fuller was a great planner and had a great ability to translate those plans into reality" (Tape Eleven, 1982). Penn provided documentation in regard to a National Endowment for the Arts grant to substantiate Dr. Fuller's ability to transform plans into reality. This National Endowment for the Arts project was detailed in the March 3, 1974 News Tribune as a special six-event program that was spread over two months, from February 21 to Arpil 23, 1974. The festival featured jazz soloists of national acclaim who were supported musically by the local high school and various Lincoln University performing ensembles. The coordination of these various events and the conception for the program was under the administration of Dr. Fuller, with Professor Penn's assistance (Jefferson City News Tribune, 1974). The review by the local newspaper was most complimentary for this Lincoln-National Endowment grant presentation. The newspaper noted "throughout there were many moments of excellence--in technique, tone and ensemble work."

Penn also noted that Fuller was always most candid with the faculty in disclosing information pertaining to the music department's budget. The university allotment was always presented to the faculty and then decisions were made in regard to the needed expenditures (Tape Ten, 1982). These group decisions on the financial status of the music department seemed to unite the faculty in their musical and educational goals. Dr. Fuller was most exacting and attentive to the financial condition of the music department. This scrutiny, in the writer's opinion, has transferred to those present faculty members who had served with Dr. Fuller. These faculty members are most attentive to their financial needs and to the allotment that is given to the music department. Penn concludes: "my ability to budget and handle large groups of people over extended periods of time can be traced to my association with Dr. Fuller" (See Appendix, Questionnaire Results).

Communication, in the writer's opinion, seems to be the common thread that is woven throughout Dr. Fuller's life. Regardless of the situation, whether the group was large or if Fuller was only speaking with one other person, he seemed to be able to gain the attention of the listener. He made it a point to know and be known. As Penn, shaking his head in mock disbelief, stated, "it would be difficult to name a state where Dr. Fuller did not have one or two friends, with whom he could contact for assistance" (Tape Ten, 1982). The ability to effectively communicate with the community, the students, the faculty and the administration seems to be a key ingredient to Dr. Fuller's achievements in education.

What Dr. Fuller seemed to communicate was a positive philosophical attitude. In the many hours this writer sat with him for interviews, he simply never let negative thinking enter into his verbal communication. This positive attitude encouraged his faculty and students to always be reacting in a positive manner toward musical achievement and musical joy. It is difficult to listen to the tapes without being affected in a most positive manner by Dr. Fuller's thoughts. He was ever prepared for his work. His thorough preparation, his communicating ability and his positive manner were effectively used to guide the social and musical growth of the University.

Upon the retirement of Dr. Fuller in 1974, the Detroit chapter of the Lincoln Alumni Association presented him with an award that bears the following inscription: "the touch of your life has been an endless source of love and strength to humanity." Truly, Dr. Fuller is a special person who believes in the special joy of music. He has been communicating this special joy through his consistent teaching and administration in higher education for over fifty-four years. Certainly an "endless source of love and strength to humanity" is an apt description of this scholar, teacher, humanitarian.

## CHAPTER V

## SUMMARY, DISCUSSION OF FINDINGS, IMPLICATIONS AND PROBLEMS FOR FURTHER RESEARCH

### Summary

This paper has attempted to recognize an outstanding educator and his work in music education. Significant to this paper were his efforts to be a contributing member to society despite racial bias directed from segments of our American population against another. His lifelong efforts in music and music education have touched many people. His communicating ability has brought students and the community at large together through their common musical goals and learning experiences.

### Discussion of Findings

When an individual is the first in any endeavor, the weight of being first can sometimes be too difficult a burden to carry. However, Dr. Fuller has carried his responsibility to his country, to his race and to education proudly with the wit, grace and dignity that people have come to expect and enjoy.

Dr. Fuller has carried the responsibility given to him by Lincoln University. The given responsibility was to develop music at Lincoln University into a major university discipline. Subsequently, he developed three degree programs from a discipline that previously had no degree programs. Lincoln became the second institution with a black heritage to be recognized by the National Association of the Schools of Music. This recognition of the quality of work being performed by Dr. Fuller is especially significant when the reader is able to absorb the racial and environmental concerns of the late 1940s.

The reason for the success of Lincoln and the Lincoln Department of Music in being able to work with urban and rural students of varied academic backgrounds, is in large measure due to the professors at Lincoln who accepted their responsibilities with their hearts as well as with their intellectual professionalism.

Dr. Fuller's characteristics portray what is most noble about the teacher-student relationship. Patience, concern, exemplary effort and the ability to effectively communicate are documented throughout his career.

Mrs. Fuller, according to Dr. Fuller, was a constant source of strength for him. Mama, as she is known by her friends, also is a most effective communicator. During times when there may have been some doubt on Dr. Fuller's part as to procedure on a certain course, Mrs. Fuller gave him the support he needed to continue his efforts. Their decisions, such as regarding his doctoral studies and going to Lincoln University, were shared decisions. Once the decisions had been made, they supported each other in their efforts to succeed at their work. During the time this writer was with both Dr. and Mrs. Fuller, this writer could feel the bond that joined them together--a bond that is only possible through a sharing of many years of life experiences.

To many incoming black freshmen, Dr. Fuller was the person who would take the fertile and questioning minds and fill their minds with the knowledge and joy of music. Such was the greatness of this job of learning about communicating through music, that the feeling of uncertainty of working in a world of many skin colors was greatly minimized.

The incoming white freshmen, soon found that Dr. Fuller provided an atmosphere of learning, not an atmosphere of distrust. Such was the effectiveness of Dr. Fuller's communicating ability that color questions tended to disappear. The quest for learning replaced attitudinal color problems.

As noted in the remarks made on his behalf at the Pioneer in Missouri Education awarding ceremony: "Dr. Fuller has been a national leader in the field of music education throughout his distinguished career and he has been a leader in the growth of Lincoln University." His place in music education is secure, marked by the joy of learning through music that he was able to give his students. The mention of Dr. Fuller's name to the music alumni brings a smile of warmth and of joy. They know that through his efforts they have been given the opportunity and courage to persevere and succeed.

## Implications and Findings for Further Research

A concern that Dr. Fuller expressed, was the possible neglect of the black student in previously white but now integrated public learning institutions. This area, the writer believes, has been addressed in a general manner, but further study specific to the arts seems warranted.

Further studies of individuals who have clearly served education in a superior manner seem worthy of documentation. One reads of the touring artist, the star athlete, the prize winning chemist, but seldom does one read of the individuals who were the foundations upon which future individual educational enterprise was made possible.

Clearly, the recognition and dissemination of information about outstanding educators would emphasize the lives of those who can well serve as positive role models. The field of education all too often is subjected to external negative criticism. Humanitarians and scholars typified by Dr. Oscar Anderson Fuller are working every day to make education work for their students and for society.

## REFERENCES

### Books

Avery, Grace Gilmore, and Floyd Shoemaker (eds.). The Messages and Proclamations of the Governors of the State of Missouri. Vol. 5. Columbia: State Historical Society, 1924.

Brown, Roscoe C. "The Black American's Dream of Success," in Minorities and the American Dream. New York: Arno Press, 1976.

DuBois, W. E. Burghardt. "The Talented Tenth," in The Negro Problem. New York: James Pott, 1903.

Garritt, Gabriel. "The Negro Student in the U.S.A.," in Negro: An Anthology. New York: Frederick Ungar, 1970.

Edmonds, Ronald R., and Charles V. Willie. *Black Colleges in America*. New York: Teachers College Press, 1978.

Greene, Harry. *Holders of Doctorates Among American Negroes, An Educational and Social Study of Negroes Who Have Earned Doctoral Degrees in Course from 1876 to 1943*. Prairie View: Crofton Publishing, 1945.

Greene, Lorenzo J.; Kremer, Gary R.; and Holland, Anthony F. *Missouri's Black Heritage*. St. Louis: Forum Press, 1980.

Johnson, Kenneth M. (ed.). *Official Manual--State of Missouri 1979-1980*. St. Louis: von Hoffmann Press, 1981.

*Laws of Missouri*. Thirty-Sixth General Assembly. Jefferson City: Tribune Printing, 1891.

*Laws of Missouri*. Fifty-First General Assembly. Jefferson City: Hugh Stephens, 1919.

*Laws of Missouri*. Sixty-Seventh General Assembly. Jefferson City: von Hoffman Press, 1949.

Marshall, Albert P. *Soldiers' Dream--A Centennial History of Lincoln Unviersity 1866-1966*. Jefferson City: Lincoln University, 1966.

McKenney, Nampeo D. R. (ed.). *The Social and Economic Status of the Black Population in the United States: An Historical View, 1790-1978*. Washington, D.C.: ULSL Department of Commerce series P-23 No. 80.

Morrison, Allan. "One Hundred Years of Negro Entertainment," in *"Anthology of the American Negro in the Theatre*. Edited by Lindsay Patterson. New York: Publishers Company, 1969.

Myrdal, Gunnar. *An American Dilemma*. Vol. 1 and 2. New York: Random House, 1944.

Savage, W. Sherman. *The History of Lincoln University*. Jefferson City: New Day Press, 1939.

Thompson, Daniel C. *Private Black Collages at the Crossroads*. Westport: Greenwood, 1973.

Washington, Booker T. "Industrial Education for the Negro," in *The Negro Problem*. New York: Arno Press, 1976.

### Newspaper

*Jefferson City News Tribune*, March and April, 1974.

### Paper (unpublished)

Introductory remarks from the 1981 Pioneer in Missouri Education Awards.

### Taped Interviews

Copies of all taped interviews are located in the Lincoln University Ethnic Studies Center in Jefferson City, Missouri.

Tape One, recorded 7/7/79.
Tape Two, recorded 7/15/79.
Tape Three, recorded 7/21/79.
Tape Four, recorded 12/22/80.
Tape Five, recorded 12/18/81.
Tape Six, recorded 4/17/81.

Tape Seven, recorded 11/16/81.
Tape Eight, recorded 1/7/82.
Tape Nine, recorded 4/28/82.
Tape Ten, recorded 5/26/82.
Tape Eleven, recorded 6/1/82.
Tape Twelve, recorded 6/2/82.

## APPENDIX

### AWARDS TO DR. FULLER

National Association of Negro Musicians
Omega Psi Phi Fraternity
Missouri Arts Council
Phi Mu Alpha Sinfonia
Lincoln University National Alumni Award
Tri-State Music Festival
Pi Kappa Lambda
Christiansen Choral School Award
Omega Psi Phi Fraternity
Lincoln University Detroit Alumni Award
National Association of Teachers of Singing
Academy of Musical Recorded Arts and Sciences Award
Bishop College Alumni Hall of Fame
Missouri American Choral Director Association --Choral Director of the Year (1975)
Pioneers in Education for the State of Missouri
Missouri Association of Humanities Education--Honorary Life Member
Lincoln University Emeritus Professor of Music
Distinguished Community Service to City of St. Louis
Lincoln University Board of Curators Award of Recognition
Alumni Association Certificate of Recognition (1975)
Certificate of Service--Missouri Music Educators Association--25 years--1978.

N.A.S.M. Accreditation

January 9, 1950

Dr. James T. Quarles
Fairhope, Alabama

Dear Dr. Quarles:

It was very kind of you to write after reviewing the NASM report on our examination. We were happy to know that you were still thinking about us although quite some distance away.

Dean Jordan's visit with us, October 31st-November 1st, was very pleasant for all concerned. The students and faculty of the Department were eager to demonstrate their abilities and accomplishments which had been greatly enhanced by the increased facilities, both in quality and quantity. They accepted the inspection and examination as a personal challenge to them as representatives of their Department and University.

We are deeply indebted to you for the contributions which you made on the occasion of your visit with Dr. Moore. Your observations and helpful suggestions were the ground work of our improvement and served as a great stimulus to the progress of our work. We remember your visit so pleasantly and hope that you will find time to come and see us again.

We anxiously await the Cleveland meeting of the NASM and their final action on our application. We are pleased with the consideration we have already received from the Committee and pledge ourselves to work even harder to be worthy of their consideration.

We have redecorated our basement at home and hope that you will come to see us soon and have some more pie and other delicacies.

We extend to you and Mrs. Quarles our best wishes for the New Year.

Sincerely yours,

O. Anderson Fuller
Head, Department of Music

OAF:md

## LINCOLN UNIVERSITY DEPARTMENT OF MUSIC ACCREDITED BY N.A.S.M.

The accreditation of the Department of Music of Lincoln University, Jefferson City, Missouri, by the National Association of Schools of Music and election to membership in that body on February 24 [1950] in Cleveland, Ohio, brought recognition and distinction to another of Missouri's institutions of higher learning.

Music has held a time-honored place in the work and life of Lincoln University through the years. In an early curriculum announced by the institution in 1868, vocal music was listed as a subject. The recognition of music as an important factor in the cultural and social life of the campus and as a fine public relations medium led to the organization of choral and instrumental groups. The first teachers of music were those who could give instruction primarily in the three "R's" and also had an acquaintance with the fourth "R" - the Rhythms of the Rhymes. The interests and needs soon grew to such proportions, however, that teachers were appointed for their training and teaching skills in music. Programs, recitals and annual concerts revealed the achievements of the students' individual and group performances and justified the instruction and facilities which were afforded.

When music was made a required subject in the curriculum of all students preparing to teach in the elementary schools, normal methods in public school music were offered but received only one half the credit granted the purely literary subjects. In spite of this disparity music began to forge its way into the academic pattern of the institution. Courses in music appreciation and some applied music subjects were given credit as free electives in the liberal arts and teacher-training curricula. The offering of a minor in music soon followed the granting of credit for music as free electives. The approval of a major curriculum in music, leading to the degree of Bachelor of Science in Music Education, presented a new opportunity and challenge to students in residence and attracted other students to the University.

September of 1942, Dr. O. Anderson Fuller, who had just received the Ph.D. degree in Music from the University of Iowa and who had served as director of music at state colleges in North Carolina and Texas, was appointed as head of the department of Music. Under his leadership music has developed phenomenally at Lincoln, The enrollment of music students represents fifteen states; the music faculty has been increased from four to nine full-time teachers; the music equipment and facilities have developed proportionately; and the curriculum has been revised and broadened. Student recitals are present each week and concerts by the band, orchestra, and choirs are given throughout the year. The large choir performs oratorios and other choral works with accompaniments furnished by the orchestra. The concert choir travels extensively through the Middle West. In addition to Missouri, it has given concerts in Kansas, Illinois, Indiana, Ohio and Michigan.

Graduates of Lincoln University's Department of Music are teaching in Missouri, Arkansas, California, Illinois, Indiana, Louisiana, Oklahoma and Texas. Many have done graduate study at Chicago Musical College, Wayne University, University of Oklahoma, University of Kansas, University of Michigan and the University of Southern California.

A modern, functional, standard music program is at work at Lincoln University in the preparation of teachers and performers of music and in the enrichment of the cultural life of Missouri and the neighboring areas.

UNIVERSITY OF IOWA
THE GRADUATE COLLEGE

Final Examination of
OSCAR ANDERSON FULLER
B.A., Bishop College, 1924
M.A., State University of Iowa, 1934

for the Degree of
DOCTOR OF PHILOSOPHY

COMMITTEE IN CHARGE

Professor Clapp
Assistant Professor Small
Assistant Professor Stark
Assistant Professor Alspach
Associate Professor Koelbel

Dr. Stone
Professor Stewart
Associate Professor White

Senate Chamber, Old Capitol
Wednesday, July 22, 1942
1:00 P.M.

Fields of Graduate Study
By Dr. O. Anderson Fuller

Major Subject: Musical Composition, Theory
- Composition (Thatcher, Clapp)
- Theory, Canon and Fugue (Curry, Small)
- Instrumentation (Curry)
- Modern Music, Musical survey (Clapp)
- Readings and problems in psychology of of music (Ruckmick, Small)
- Music research (Clapp)

Minor Subject: Voice and Choral Music
- Voice (Diercks, Multer, Stark)
- Choral music and conducting (Diercks, Multer, Stark)
- Choral problems (Stone)
- Piano (Thatcher)
- Piano Accompanying (Alspach)

## SUMMARY OF DISSERTATION
## "THE CREATION": AN ORATORIO FOR 12 PART, SYMPHONIC-MIXED CHORUS (UNACCOMPANIED) AND BARITONE SOLO

The text of this work is the second of a set of Negro sermons in the volume, "God's Trombones," by James Weldon Johnson, and bears the same title as the sermon, "The Creation." Dr. Johnson found such a favorable comparison between the voice of the "old-time" Negro preacher and the music instrument, the trombone, that he selected it as part of the book's title.

The 12 part, symphonic-mixed chorus, unaccompanied, was chosen as a rather natural medium of expression, capable of the desired effects which the interpretation seems to demand, and the imagery and rhythm require.

Although the work is cast in the one-movement style, as a sermon would most naturally proceed, it seems to have three definite parts: The Void and Decision to Create the World; The Creation of the World with its Plant and Lower Animal Life; and the Creation of Man.

The melodic material is fashioned in the Negro folk style, but is entirely original. A conscious effort was made not to incorporate any folk melody of either secular or sacred nature, but in spite of this a sufficient amount of melodic intervals and nuances is present to give it a distinct Negro flavor. The rhythms definitely have a Negro pattern that uses many strange but interesting devices suitable to the metric wanderings of the free, blank verse.

Much of the harmony used in this work is an attempt at tone colouring which is suggested by the highly figurative language employed in the description of the creation. For the "Void," fifths and octaves are employed rather freely in succession. For such effects as "darkness," "cypress swamps," and "clustered stars," mixed and altered chords of a free type are used. Where sudden results are accomplished in the "creative" process, all voices in unison are followed by a full chord, well distributed among all parts and solo voice.

The contrapuntal structure is formed by the use of strict and free imitation. Treble and male voices are handled orchestrally with "sans parole" sounds. While there are principal and subordinate themes, which have subsequent treatment and development of a symphonic nature, it was not the plan to pour this text into the mold of a strict form, but rather to enrich it with a free, musical setting.

The climax is reached by the solo voice leading into a frugal exposition, which breaks, before it reaches full fruition, into antiphonal effects between soloist and chorus. The end is attained with choral brilliance and expressive resolution.

## Compositions (in manuscript)

"Camp Meetin'" tone poem for symphonic band
Sonata in G minor for piano
Chaconne in F minor for piano
Preludes and Fugues for piano (with themes from Negro Spirituals)
Teaching Pieces for Children studying the piano
Quartet in D minor for strings
Quartet in G for strings
Theme (original) and variations for chamber orchestra
Song Cycle for solo voice (texts from poems of Negro writers)
Choral works with and without accompaniment
Various arrangements of Negro Folk Songs for treble, male and mixed voices

## Questionnaire Results

The following are the replies of questionnaires that were sent to alumni, faculty and community people who have been associated with Dr. Fuller's work. As the writer read the returned questionnaires, it seemed that Dr. Fuller continually placed the program and the students as the focal points of his efforts. The first response is from Professor Marshall Penn.

### Professor Marshall Penn

"Dr. Fuller was my first employer. I worked as his conductor of Bands and Orchestras for twenty-seven years. When I first came to this town, a Negro could get a drink of water downtown only at the bank, a filling station, or a movie theater. Negroes could live on very few streets. It was Dr. Fuller who helped me by finding me not an apartment, but a room with a bathroom and car washing privileges.

Dr. Fuller offered his assistance when it came time for study on my advanced degree. He called his adviser at the University of Iowa and secured an appointment for me with the Head of the Graduate School. Dr. Fuller was a major cause of my passing the French language requirement for the Doctor of Philosophy Degree. Dr. Fuller assisted me with outlines for the courses which were assigned to me my first year on the job. Dr. Fuller served as the business manager of the band when we traveled during my first year. I did not know the area nor the people of Missouri. Dr. Fuller took me shopping for the music we would use for the year. We would go to Jenkins Music. While he selected the literature he would use in the choral program, I would select the music I would need in the band and orchestra program. It was Dr. Fuller who introduced me to the band conductors in the schools of St. Louis and Kansas City, Missouri. It was Dr. Fuller and the choir who did the first recruiting for the band and orchestra. There were no scholarships in those days and I knew very few conductors.

It was Dr. Fuller who secured me my first opportunities to serve as an adjudicator and guest clinician. I first served as a vocal clinician. It was through and because of Dr. Fuller that I began my seven year association with Helias High School as the conductor of their Annual Musical Series.

Dr. Fuller was one of the top musical administrators in this country. He was a great planner and had a great talent for spotting talented musicians and then selecting talented musicians who would work smoothly and harmoniously together. The basic working staff of the 1981-1982 music faculty is composed of people hired by Dr. O. A. Fuller. Dr. Fuller has served as a consultant to every person who has stepped in as Head of the Department of Music since he retired.

It was during Dr. Fuller's tenure as Department Head, the band scholarship grew from a scholarship of $25.00 each per semester to $750.00, or room, board and tuition. It was through Dr. Fuller's contacts and interest that a String Institute program was established. It was through Dr. Fuller's cooperation and encouragement I was able to establish a Summer Band program, which was the forerunner to what is known in Columbia as the Missouri Symphony Society. This Summer Band grew to about seventy members at its largest. The band performed a summer concert and played the commencement ceremony at the close of the summer session.

My own traits of punctuality, thoroughness and attention to detail were reinforced through my association with Dr. Fuller. My ability to budget and handle large groups of people over extended periods of time can be traced to my association with Dr. Fuller."

Ruth Hatcher

Alumna, Ruth Hatcher (1966), notes that "he [Dr. Fuller] was always very helpful to me whenever I needed or asked for assistance. Dr. Fuller is a great man whom I shall always love and admire. I remember the many fine student seminars. Most certainly I remember the participation in the concert choir for four years and the many concerts and recitals that were performed each school year." Ruth Hatcher has taught music in the Gary, Indiana school system for over fifteen years.

## Henry Walker West

Alumnus, Henry Walker West (1949), has completed his M.S. at Central Missouri State University and has been involved in post-graduate study. He has taught for many years in public schools and churches around the Kansas City area. Mr. West remembers that "I enrolled at Lincoln University, September 1945, with an elementary working knowledge of music. Dr. Fuller and the music faculty were patient and understanding of my lack of knowledge of the field and proceeded to assist me. My singing voice was average or below and I soon recognized a change for the better under Dr. Fuller's instructions. To be given the opportunity to be assigned major solo roles in several compositions did great things for me. When I would go to him for advice on an assignment or personal matters, he was THERE. I have visited with Dr. and Mrs. Fuller several times since I left Lincoln. If I had a particular problem or wanted to share a particular experience, he was always ready to hear me and if need be, offer suggestions.

I heard Bach's Christmas Oratorio on television this past Christmas and I remembered well the work that went into our production of the same at Lincoln. To be given the tenor role from this oratorio was and has been important in my life. To be a part or member of the University Concert Choir was also major in my life, not only then but now, as I can perform with choirs when they do these works and have been told that I contribute much to the various organizations. The overall knowledge of the field of music, instrumental as well as vocal, has made my teaching and performing, and in the past few years, my listening to music more enjoyable. The public relations that was part of the Concert Choir and travel with it, was a major part of my stay at Lincoln.

There are many methods, approaches and techniques that Dr. Fuller used that I use daily. One in particular was his relaxed manner and yet business-like manner in the classroom. Dr. Fuller was always neat, very seldom did I see him on the campus without a coat and tie. He always insisted that the choir be properly dressed, which included white shirts and dark ties and slacks for the men and dark dresses and hose for the women, even with robes--'I do not permit students to perform in public in a relaxed manner.'

The music department was like one big happy family. I found the faculty and students very considerate. I am a stammerer and there were times that I could upset classes with my speech if the students were not considerate and for this I will always be grateful. Some of the courses in music, at the time, seemed out of my interest, but today I am using many of them and need them. The opportunity to do directed teaching on the campus was a magnificent experience and I have been considerate of the four student teachers that have been assigned to me."

Dr. Milton G. Hardiman

Retired Professor Emeritus Dr. Milton G. Hardiman notes, "I was always under the impression that he could have handled many positions of higher academic status. His crisp speech and clear thinking always brought a seriousness to the subjects under discussion. His apt grasp of discussions and debate held the keen attention of his co-workers. He could hold his own in almost any group of individuals. He was a serious and dedicated musician of high order, but I do remember on one occasion at a regular convocation of students, he suddenly brought down the house with a boogie-woogie rendition of some popular music.

Professor Harrison

Professor Harrison of the University of Missouri-Columbia, remembers "his diplomatic expertise was very effective, enthusiastic, consistent, sincere and well-founded whether we were making decisions regarding program planning for the annual state meeting, the constitution and by-law revision, membership or committee work of any kind. He always worked in a democratic manner and for the best interests of everyone concerned. He was frequently an inspiration for the group. His chorus performed often during the state meetings and he demonstrated outstanding skill as a choral conductor. He developed exceptional choirs.

It was certainly evident that Dr. Fuller constantly strived to see that students at Lincoln University had the best opportunities possible, to achieve high quality training. I became very aware of this from being on the campus several times to meet with the students enrolled in music education classes as well as to engage in curriculum planning with Dr. Fuller and his staff."

Dr. Armistead Scott Pride

Professor Emeritus Dr. Armistead Scott Pride recalls his "professional relations with Dr. Fuller over a period of thirty-three years at Lincoln University were always of a high order, exacting yet friendly. He concentrated his inexhaustible energies and administrative skills on the development of the Department of Music and gave it the leadership that gained for the university, departmental accreditation for its music offerings.

For upwards of two decades Dr. Fuller rendered priceless service in helping the Public Relations Committee (which I chaired) to assemble annually the roster of concerts and speakers for the University Lecture-Recital Series."

Eugene Haynes

Former Lincoln faculty member, Eugene Haynes, now Professor of Music, Artist in Residence (piano), at the Unviersity of Illinois states, "I have known Dr. Fuller since my boyhood. After I finished my graduate work at Juilliard, he offered me a position at Lincoln University. After a semester I went to France to study with Nadia Boulanger. Some seven years later, Dr. Fuller contacted me in Denmark, to invite me back to Lincoln as Artist in Residence. This was uncommon at the time in black institutions. Dr. Fuller was always supportive of my career, allowing me the freedom to arrange numerous concert tours. On several occasions I took a year's leave to tour the world, always with his encouragement. Dr. Fuller encouraged me to teach Music History as a humanities course long before such an approach was taken up elsewhere as innovative. This allowed me to demonstrate the interaction of art, literature and history with the development of music. He wanted me to share my total experience with students in Music History and in Piano Master classes."

Rose Dryden Palmer

Alumna Rose Dryden Palmer (1948) praises

Dr. Fuller by stating, "Dr. Fuller was one of the best instructors a person could have. From the freshman year up to graduation, he was always there to help with our problems. He never was too busy to schedule you for conferences. I'm happy that Dr. Fuller saw my potential and brought me through those years. The weekly seminars made us shaky sometimes, but it was good training. We had to rehearse, work hard, so we would have good performances when our time came.

I have never met another instructor in all of my years of teaching (31 years) with as much patience and the ability in his way of pulling out the best in you." Mrs. Palmer ended the questionnaire by saying "some of this you probably don't need, but I could talk for days on O. A. Fuller. He was the greatest."

### Mildred Nadine Brown Wallace

Alumna Mildred Nadine Brown Wallace writes "Those years were happy years because I was surrounded by people whose interests were like my own. Music was so important to all of us. Our goals were so definite then, and Dr. Fuller and his colleagues made them all seem attainable. These years were a very important part of my life. Dr. Fuller's methods have been extremely useful in conducting my own music classes. I try to give my students the love for music that Dr. Fuller helped develop in me. Seminars, recitals, concerts and musical tours were some of the events that were most beneficial to me. The opportunities to perform gave us invaluable experience that has had value in my profession."

# VITA

Name: Steven Houser

Birthplace: Indianapolis, Indiana

Date of Birth: February 28, 1945

Education: Bachelor of Music Education
Wright State University
Dayton, Ohio, 1973

Master of Arts
Ohio State
Columbus, Ohio, 1975

Doctor of Philosophy
University of Missouri-Columbia,
Columbia, Missouri, 1982

Experiences: Air Force Band, 1966-70

Dayton Philharmonic Orchestra, 1974-77

Antioch College, 1974-76

Sinclair Community College 1976-77

Lincoln University, 1977-82

# A STUDY COMPARING COMPUTER PITCH DRILLS WITH PIANO PITCH DRILLS

Melba S. Milak, Parkway Public Schools
St. Louis, Missouri

## INTRODUCTION

With the total number of computers in classrooms being 130,000 which is an average of 1.6 computers for each of the 8,200 public schools in the country (Faflick, 1982), it is no surprise that some of them have found their way into music classrooms.

The exact number of computers in use in music classrooms cannot be cited, but the sounds generated by computers are adding new excitement to the other sounds traditionally produced in general music classes, e.g., Orff xylophones, small percussion instruments, recorders, bells, autoharps, and guitars.

It is often assumed that junior high and high school students will be able to work with computers, but it must be remembered that elementary age school students are "growing up" with these sounds; video games and computer sounds are a part of the normal sound environment for them.

In fact, when this study was being designed for first graders (five and six year olds), a profile for each of the 82 individuals revealed:

1. 35 have pianos in their homes, although only 8 were taking piano lessons,
2. 14 have computers in their homes, and
3. 63 have video games in their homes!

Since video games and computer sounds are similar, it can be said, at least for this population, that first grade students are equally or even more familiar with electronically produced sounds than those which are traditionally produced. This profile did not take into account listening to recorded music, i.e., television, radio, and stereo music.

Besides listening to the sounds, it is becoming more recognized that elementary students should be encouraged to work with computers.

> Even among educators who worry about too much tilt to technology, there is growing agreement that a computer is a powerful motivator of a school-age child. Students with access to a micro spend more time studying and solving problems. Those who write at their keyboards compose more freely and revise their work more thoroughly. "It's not just a matter of number crunching," argues Arden Bement, a vice president of TRW, "it's a new way of thinking. The kids who don't get indoctrinated to computers by seventh grade are not going to develop the same proficiency" (Faflick, 1982, p. 69).

Working with a computer gives the student many advantages in the learning process:

> Good CAI (Computer Assisted Instruction) programs are based on sound principles of learning as well as effective instructional strategies. One of the most basic of these principles is the timely application of reinforcement to student responses. As a student progresses through responses, he or she receives immediate feedback on these efforts. . . . Other advantages also found with CAI:
>
> 1. Individualized instruction: Provides a student the opportunity to work at his

> or her own time and rate while receiving individual attention.
>
> 2. Level adjusting: Student works at a comfortable level, progressing when a level has been mastered.
>
> 3. Immediate positive reinforcement: The most effective moment to learn is the exact moment when reinforcement is applied to the learning stimulus. At that moment a change of behavior occurs or at least is begun. CAI encourages this immediate response.
>
> 4. High motivation: Today's students are enthusiastic about electronic technology. . . .
>
> 5. Consistency: Computers don't get tired and lose their patience. They can and will do the same thing over and over without getting edgy, thereby being particularly effective for the development of skills. . . .
>
> 6. Organized instruction: Good software programs present logical, sequential instruction, a condition not always present in our classrooms.
>
> 7. Personalized attention: Some students feel excluded or threatened because of a lack of ability, skills or knowledge. Computers permit students to participate in a nonthreatening atmosphere while developing skills and knowledge without risking embarrassment or humiliation by peers or teachers (Franklin, 1983, p. 29).

For elementary students to work with computers does not mean that first graders must learn to program, however. Rather use of the computer should help the students to become computer literate.

> Being computer literate does not necessarily mean understanding all the complex inner workings of the machine and its related equipment. It means knowing how to use a computer for your own applications and recognizing other potential uses for the machine (Gawronski & West, 1983).

To develop computer literacy, it is important that a scope and sequence (Bitter, 1982, p. 60) be established for grades K-12, or for K-6 at the elementary level, to provide the proper introduction to the computer and experiences for its continued use.

For this study, the scope of the first grade students' experiences included:

1. The introduction of computer vocabulary.
2. A discussion of uses of the computer, specifically its uses in music.
3. The operation of the computer, i.e., how to load and run a prepared program.
4. The use of the keyboard, i.e., how to locate and identify letters, numbers, and special keys for operations and commands.

These experiences were used to help the first grade students begin to be computer literate while teaching a basic concept of music, i.e., the differences in the registers of high, middle, and low pitch.

## PURPOSE

The purpose of this paper (an experiment carried out with 82 first grade students) is to test the effectiveness of teaching the concept of pitch register, i.e., high pitch, middle pitch, and low pitch, by using two different kinds of pitch drills; namely, by computer or by piano both in combination with general class instruction. The sound for the computer pitch drills was produced with an Apple II microcomputer equipped with a Micro Music DAC board (Temporal Acuity), and the sound for the piano pitch drills was produced with a Baldwin console piano. Hereafter, the students in the groups which received the computer pitch drills will be referred to as the computer treatment group, and the students in the groups which received the piano pitch drills, the piano treatment group. Both groups received the same curriculum (See Appendix).

The experiment was carried out in an elementary school in St. Louis County, Missouri. Four classes of first grade students participated in the experiment. Since these students came to the school from different kindergartens and nursery schools, and since the classes were not assigned in any homogeneous manner, the groups were considered to be random.

At the end of the treatment period and after the posttest, the computer treatment group was given the piano pitch drills, and the piano treatment group was given the computer drills, so that each student could become familiar with both the computer and the piano.

The pitch drills, the curriculum, and the testing were presented to the classes during the regular general music periods by the vocal music teacher (the author of this paper).

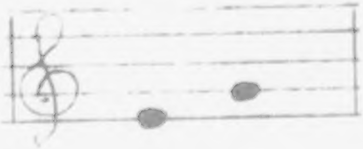
## CURRICULUM

The curriculum was designed by this author to teach the concept of pitch register: high pitch, middle pitch, and low pitch. The curriculum consisted of six lessons; each lesson was intended for use in a thirty-minute music class. Each lesson contained:

1. Pitch Drill
    a. Computer pitch drill for the computer treatment groups
    b. Piano pitch drill for the piano treatment groups
2. American folk song - with a gradual expansion of the singing range from a minor third to an octave, i.e.,

Lesson One

Whose Name is . . .?



Lesson Six

Cotton Eye Joe

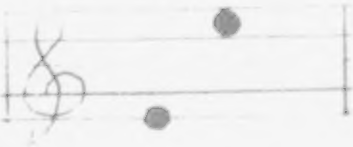
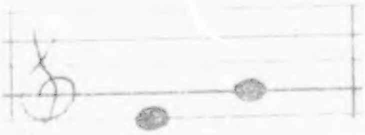


Figure 1. American Folk Songs

3. American singing game - a game song with movement or dance with a gradual expanison of the singing range which correlates to the range expansion in the American folk song, i.e.,

Lesson One

Macaroni, the Pony



Lesson Six

Old King Glory

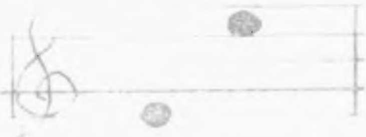


Figure 2. American Singing Game-Pitch Ranges.

4. Listening Selection

   a. Two Lessons - Electronically produced songs
   b. Two Lessons - Piano Recordings
   c. Two Lessons - Orchestral recordings

The activities in the curriculum were designed to provide the necessary skills with which students would be able to understand and conceptualize about pitch, especially pitch register.

PITCH DRILLS

An isolated pitch is difficult or impossible to define as high, middle, or low, just as it is difficult to define the color red, although both sound and color can be defined referentially as "the first pitch is higher than the second," or "that object is red, not green." But before a referential explanation can be used, it is necessary for students to have a working vocabulary of the terms, e.g., high pitch or red.

For example, it is a common mistake for first graders (five and six year old students) to call a high pitch low or a low pitch high because they have never used the terms in relation to music examples.

The terms themselves must be learned. Robert M. Gagné's theory of learning (1965) accounts for this. Gagné has defined eight types of learning relative to the conditions that exist within the learner which cause a particular type of learning to occur.

The conditions of learning which support learning the terminology for high pitch after hearing one or several high pitches produced by some kind of instrument (in this study either by the computer or by the piano) is Gagné's type 4 learning:

> Type 4 - Verbal Association
>
> This type of learning is a form of chaining two or more conditioned responses being linked together in which the chains are verbal instead of physical. The links of the chains are internal because the learner already associates meaning with words.

The student's ability to use the knowledge of "high pitch," "middle pitch," and "low pitch" in reference to one another, i.e., "the first pitch is higher than the second pitch," is not learned until what Gagné calls Type 6 learning:

> Type 6: Concept Learning

> The ability to categorize objects or events into manageable classes and to recognize new objects or events as being members of a particular class (Gagne, 1965, p. 34).

Piano Pitch Drills

For the purposes of demonstration and to define high pitch, middle pitch, and low pitch to students in the piano treatment group, the keyboard was arbitrarily divided into three registers (see Figure 3).

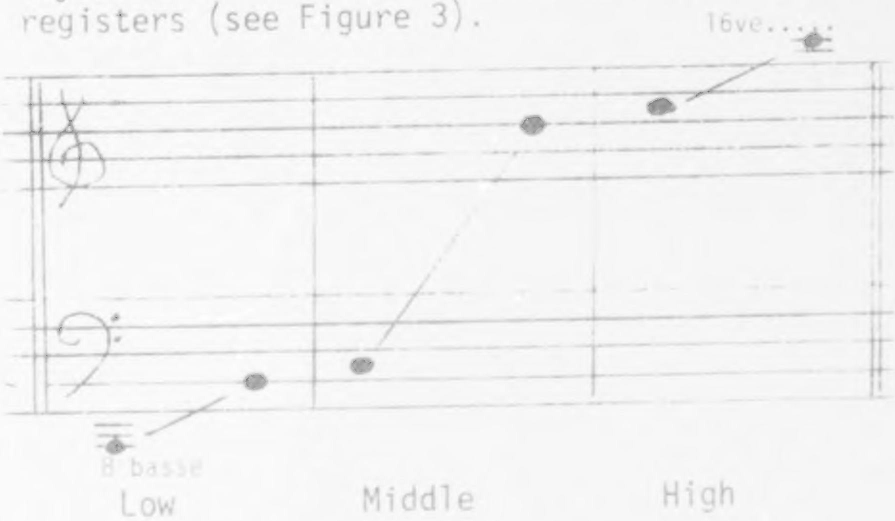


Figure 3. Piano pitch registers.

Computer Pitch Drills

The computer program used for demonstration to the computer treatment group was Basmusic (Williams, 1982), a system of music notation and playing by David Williams. This system employs fewer pitches than a standard 88-key piano, so care was taken to insure that the pitches produced by the computer, even though fewer in number, correlated to the pitch registers used in the piano pitch drills (see Figure 4.)

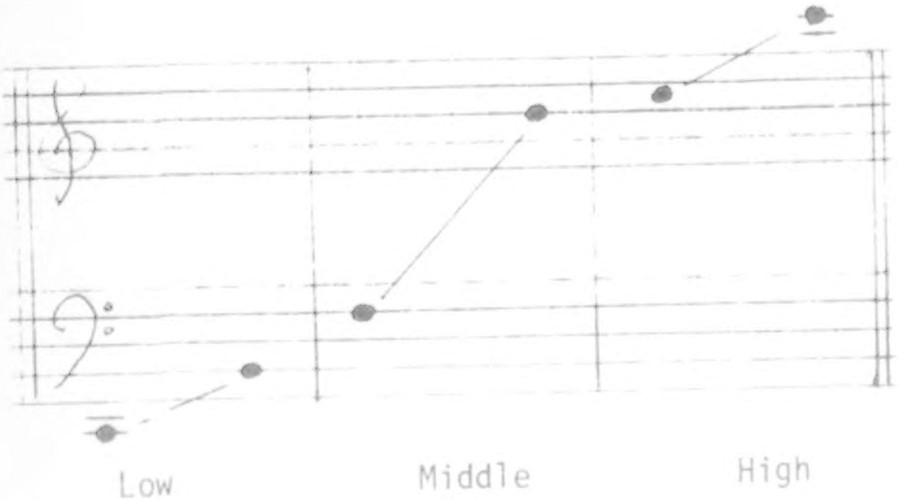


Figure 4. Computer pitch registers.

Drill No. 1

Pitch drill No. 1 was the same for both treatment groups. Students used their own voices to produce high, middle, and low pitches. An adaptation of a camp game, "Let's Go on a Bear Hunt!" called "Let's Go on a Witch Hunt!" was used. To accompany the speaker's refrain, "Let's go on a witch hunt," students responded in a high voice for the ghost's answer, "All right"; in a middle voice for the goblin's answer, "Okay"; and in a low voice for the monster's answer, "Let's go!" Appropriate hand signals were used to represent high, middle, and low.

Drill No. 2

Students listened to high, middle, or low pitches at which time the pitch was called by its appropriate name. The students also used their own personal body space to act out or move to the pitches, e.g.,

High pitch - reaching up, walking on tip-toe
Middle pitch - walking, kneeling

Low pitch - crawling, slithering

The piano pitch drills were played on the piano by the teacher; the computer pitch drills were Basmusic programs including Random Note Demo, Scale Demo, and Gliss Demo (Williams, 1982).

Drill No. 3

The students in the piano treatment groups individually listened to and identified a piano pitch played by the teacher as a high pitch, a middle pitch, or a low pitch.

The students in the computer treatment groups listened to three programs designed by this author, High Pitch, Middle Pitch, and Low Pitch (Milak, 1982). Each of the programs played three pitch examples: random pitches, Hot Cross Buns, and Twinkle, Twinkle, Little Star within its register, i.e., all of the pitches in the program High Pitch were from the high register (see Figure 4).

Drill No. 4

Students in the piano treatment groups individually played a pitch on the piano for someone else in the class to name its pitch register.

Students in the computer treatment group individually typed in the commands for running and ending one of the programs, High Pitch, Middle Pitch, or Low Pitch.

Drills No. 5 and No. 6

Students in the piano treatment groups individually learned to play the melody Hot Cross Buns on the piano in the register of their choice.

(The piano treatment groups learned to sing the melody and looked at and discussed notation, but most of the playing was by rote.)

Students in the computer treatment group individually played a computer game designed by this author, Perky Pitch (Milak, 1982). It is a program with sound, color graphics, and scoring. In addition to using the computer keyboard to play the game, the students learned to type in commands to run and end the program. (The game was enthusiastically accepted and played by all of the students in the computer treatment groups.)

## PRETEST AND POSTTEST

The pretest and posttest were administered to students to test the effectiveness of the computer pitch drills and the piano pitch drills when used with the curriculum.

The pretest and posttest consisted of one section of EMAT (Elementary Music Achievement Test). This section is Pitch Test: Two Tone Patterns; it consists of fifteen questions played on a piano. For each question, two pitches are played and the students must answer whether the second pitch is higher than, lower than, or the same as the first pitch.

This test was chosen because it is a measure of the concept of learning accomplished by the students. (See above, Gagné's condition of learning, Type 6.)

The test was approximately fifteen minutes in length. Both the pretest and the posttest were administered to each of the four grups during the regular music period.

## PROCEDURE:

The design and implementation of the computer pitch drills, the piano pitch drills, the curriculum, and the pretest and posttest were to test the hypothesis:

> There will be a significant difference between the groups because of the computer pitch drills and piano pitch drills.

$$H_1: mxA \neq mxB$$

The nul hypothesis states:

> There will be no significant difference between the groups because of the computer pitch drills and the piano pitch drills.

$$H_0: mxA = mxB$$

The four first grade classes were divided into two groups of two classes each. The two groups which received the computer pitch drills plus the curriculum were called $A_1$ and $A_2$. The two groups which received the piano pitch drills plus the curriculum were called $B_1$ and $B_2$.

One week before the beginning of the treatments, all classes were administered the pretest.

The treatment lasted for three weeks. Each of the classes met twice a week for thirty minutes, a total of one hour per week. Groups $A_1$ and $A_2$ received one computer pitch drill and one curriculum lesson per class period, i.e., two per week for a total of six computer pitch drills and six curriculum lessons. Groups $B_1$ and $B_2$ also received a total of six piano pitch drills and six curriculum lessons. At the conclusion of the treatment, all of the groups were administered the posttest.

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## INTERPRETATION OF THE TEST RESULTS

### Differences between the Pretest and Posttest Scores

The Student t-test for paired observations was used to determine if there were differences in the means between the pretest and posttest scores. The t-statistic 5.70 with 81 df was found to be significant at the .01 level of confidence. This statistic indicates that significant changes occurred within the students during the treatment between the pretest and posttest.

Because of this significance, each of the classes was studied individually. The Student t-test for paired observations was used to determine if each of the four individual classes had a significant difference in the means between the pretest and posttest. Three of the four classes, $A_1 + A_2$, and $B_1$ were found to have significant differences between the means of the pretest and posttest scores at the .05 level of confidence (see Table 1).

### Analysis of Variance of the Posttest Scores

A one-way analysis of variance was used to determine whether any significant difference occurred between the means of the posttest scores between the groups, i.e., $A_1 + A_2$ (the groups which received the computer pitch drills) and $B_1 + B_2$ (the groups which received the piano pitch drills). The F-statistic, 8.25 with 1 df/80 df was found to be significant at the .01 level of confidence. The statistic indicates that there was a significant difference between the computer pitch drills groups ($A_1 + A_2$) and the piano pitch drills groups ($B_1 + B_2$). The groups who received the computer pitch drills did significantly better

Table 1

Pretest and Posttest Scores for $A_1$ and $A_2$ Computer Drills Groups and $B_1$ and $B_2$ Piano Drill Groups.

| Group | Mean | Variance | t Value |
|---|---|---|---|
| $A_1$ n = 21 | | | |
| pretest | 5.52 | 5.96 | |
| posttest | 7.71 | 10.39 | 2.51* |
| $A_2$ n = 21 | | | |
| pretest | 4.00 | 4.19 | |
| posttest | 7.43 | 13.58 | 3.42* |
| $B_1$ n = 20 | | | |
| pretest | 3.50 | 5.05 | |
| posttest | 6.85 | 9.73 | 3.70* |
| $B_2$ n = 20 | | | |
| pretest | 3.80 | 2.66 | |
| posttest | 4.55 | 1.95 | 1.68 |

*Significant at the .05 level of confidence than the piano pitch drills groups.

## Analysis of Variance of the Pretest Scores

However, when a one-way analysis of the variance was used to determine whether there was any significant difference between the means of the pretest scores between the groups $(A_1 + A_2)$ and $(B_1 + B_2)$, the F-statistic, 5.16 with 1 df/80 df, produced a significant difference at the .05 level of confidence, indicating that the groups which received the computer pitch drills $(A_1 + A_2)$ did significantly better than the piano pitch drills groups $(B_1 + B_2)$.

Two methods were employed to study the significant difference between the groups on the pretest; one of them was the correlation coefficient, the other was a difference method (Kerlinger, 1973, p. 338).

### Correlation Coefficient

To examine the occurrence of the significance on the pretest scores, an analysis of the correlation between the pretest and posttest was performed. The correlation coefficient (r) was used to determine the amount of variance which can be attributed to the regression of the pretest on the posttest. Because the correlation between the pretest and posttest scores was $r = .054$, and the square of this value is $r^2 = .003$, which is the amount of the variance attributed to the regression of the pretest on the posttest, this statistic indicates the absence of a relationship between the scores; the pretest scores account for less than 1% of the variance in the posttest scores.

Since 99% of the variance in the posttest scores is attributable to the treatment and error, and not to any effects of the pretest, a reason for the significant difference between the groups on the pretest must be found.

This author believes that the students may have guessed on the pretest. It is usually assumed or taken for granted in testing procedures that students, in general, have some knowledge of the materials on which they are being tested, i.e., past experience and knowledge affect the pretest scores. However, in this study, the first grade students had had little or no exposure to the music terminology as it was presented in the test; furthermore, these first grade students had had little or no experience with standardized test procedures. It is therefore possible that the first grade students marked any answer to fill in the test blanks; these guesses could account for the significance on the pretest scores, but which have been shown to have had no significant effect on the posttest scores.

It also is possible that the students had not been assigned randomly to the four classes and therefore, if that was the case, the groups cannot be assumed to be equal.

## Difference Method

To further study the significance on the pretest scores, a difference method which represents the standard error of the difference between the pretest and posttest scores was employed to determine any significant difference between the scores and to support the analysis of the correlation test. The F ratio was the statistic used to determine the significance of the difference scores between the treatment groups; no significance was found, again indicating that the pretest did not affect the posttest scores.

## Preliminary Conclusion

Although the significant difference between groups on the pretest scores has been shown by two different methods (the correlation coefficient and a difference method) to have had no effect on the posttest scores, it cannot be assumed that the significant difference on the posttest scores is statistically valid; some factor or factors, possibly students' guessing on the pretest or unequal groups in which the students cannot be considered to have been randomly assigned, affected the outcome of the scores.

## Analysis of Variance of the Posttest Scores between the Boys and Girls

There were 43 boys and 39 girls involved in the study. To determine if there was any significant difference in the posttest scores between the boys and the girls, a one-way analysis of variance was used. The F statistic, 2.32, with 1 df/80 df, found no siginificant difference between the scores, indicating that there was no difference in the posttest scores because of sex.

## Analysis of Variance of the Posttest Scores between Students Who Have a Piano and Students Who Do Not have A Piano

Of the 82 students in this study, 35 have a piano in their home, although only 8 of them take piano lessons. A one-way analysis of variance was used to determine if there was any significant difference in the posttest scores between the students who have a piano and those who do not. The F statistic, 10.58, with 1 df/80 df, was found to be significant at the .01 level of confidence, indicating that students who have a piano in their home did better on the posttest scores.

## Mann-Whitney U Rank Sum Test

Of the 82 students in this study, 14 have a computer in their home. Eight of them were in the computer pitch drills groups and six were in the piano pitch drills groups.

Eighteen of the students have neither a video game nor a computer in their home; seven of these students were in the computer pitch drills groups and eleven were in the piano pitch drills groups.

A Mann-Whitney U Rank Sum Test was used to determine if there was a significant difference between the posttest scores between the students in the groups which have computers at home and in the groups which have neither a computer nor a video game. The U statistic, 126, was found to be not significant, indicating that there was no difference in the posttest scores between the students who have computers or video games in their home and those that have neither.

## CONCLUSION

Since, by using the Student _t_-test, a significant difference was found between the pretest and posttest scores, and by using an analysis of variance with the F ratio, a significant difference was found between the posttest scores, showing a significant improvement in one of the groups ($A_1 + A_2$, the computer pitch drill groups), it would appear that the null hypotheses $H_0$: mxA = mxB could be rejected, i.e., there were significant differences between the groups.

However, because there were significant differences found in the pretest scores by using an analysis of variance with the F ratio (see above), the null hypothesis cannot be rejected; there was no significant difference between the groups who received the computer pitch drills and the groups who received the piano pitch drills.

There are several reasons which could account for this:

1. The groups were not random at the onset of the treatment.
2. Because the students had had little experience with standardized testing procedure, they may have guessed in their answers on the pretest.
3. The curriculum which all of the groups received was so closely related to the pitch drills that the students learned the material from the curriculum activities.
4. The reactive or interaction effect of testing, in which a pretest might increase or decrease the subject's sensitivity or responsiveness, could have affected the results of the posttest.
5. The maturation processes within the students could have affected the results of the experiment.

The results of the experiment indicate that the computer pitch drills, the piano pitch drills and the curriculum are valuable for teaching the concept of high, middle, and low pitch register to first grade music students.

Of equal importance to the students was the experience of working with the computer. Since the piano treatment group received all of the computer drills at the conclusion of the experiment, every first grade student participated in exercises designed to create computer awareness and the beginnings of computer literacy. There were no negative reactions to using the computer from any of the 82 students in the experiment; in fact, every student was eager to have an individual turn to use the computer, not only to play the music game but especially to type in commands and run the program. As second graders, these students will be ready to continue working with the computer and further enhance their skills to develop computer literacy.

The results also indicate a need for further investigation. Because the study was carried out in only one school, it is not valid to generalize the findings to a larger population; however, the design and tests used in this study could serve as a model for replication.

## Bibliography

Bitter, Gary G. "The Road to Computer Literacy: A Scope and Sequence Model." Electronic Learning, September 1982.

Colwell, Richard. EMAT. Chicago: Follett Publishing, 1965.

Erdei, Peter, ed. 150 American Folk Songs to Sing, Read and Play. New York: Boosey & Hawkes, 1974.

Faflick, Philip. "Computers: Peering into the Poverty Gap." Time, November 15, 1982.

Franklin, James L. "What's a Computer Doing in My Music Room?" Music Educators Journal, January, 1983.

Gagné, Robert M. The Conditions of Learning. New York: Holt, Rinehart and Winston, 1965.

Gawronski, J. D., and Charlene E. West. "Computer Literacy." ASCD Curriculum Update, October 1982.

Kerlinger, Fred N. Foundations of Behavioral Research (Second Edition). New York: Holt, Rinehart and Winston, Inc., 1973.

Langstaff, John, and Carol Langstaff. Shimmy, Shimmy Coke-Ca-Pop! Garden City, New York: Doubleday & Company, Inc., 1973.

Milak, Melba S. High Pitch, Middle Pitch, Low Pitch, 1982.

________. Perky Pitch, 1982.

Runyon, Richard P., and Audrey Haber. Fundamentals of Behavioral Statistics, Third Edition. Reading, Massachusetts: Addison-Wesley Publishing Company, 1977.

Williams, David B. Basmusic. Bellevue, Washington: Temporal Acuity Products (Micro Music, Inc.), 1982.

## Appendix

### LESSON ONE

Objective

To use the individual's voice to define high, middle, and low pitch.

Voice Drill

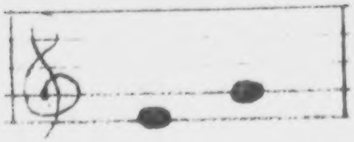
Let's Go on a Witch Hunt!

Students use different voice registers:

High Voice - Ghosts, "All right"
Middle voice - Goblins, "Okay"
Low voice - Monsters, "Let's go!"

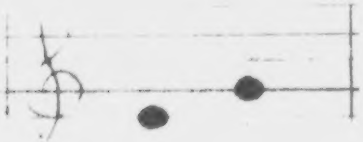
Folk Song

Whose Name is . . .?



Singing Game

Macaroni, the Pony



Listening

Vangelis. Chariots of Fire. Polydor, PD 2189.

LESSON TWO

Objective

To use the individual's personal space to physically create body movement which represents high, middle, or low pitch.

Computer Drill No. 2

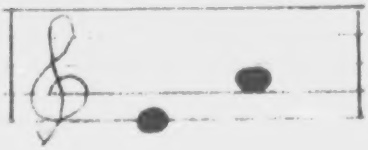
Students listen to and move to Basmusic programs, "Random Note Demo," "Scale Demo," and "Gliss Demo."

Piano Drill No. 2

Students listen to and move to high, middle, or low pitches played on the piano.

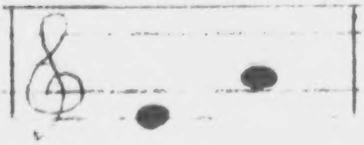
Folk Song

Starlight, Starbright



Singing Game

Wind Up the Apple Tree



Listening

Brahms. Hungarian Dance, Op. 39, No. 5. Connoisseur, CS-2037.

LESSON THREE

Objective

To be able to listen to a pitch and identify it as high, middle, or low.

Computer Drill No. 3

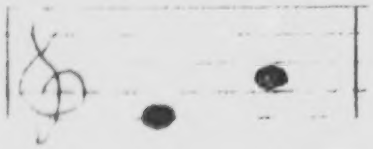
Students listen to programs High Pitch, Middle Pitch, and Low Pitch, each of which plays a series of random pitches, Hot Cross Buns, and Twinkle Twinkle, Little Star.

Piano Drill No. 3

Students listen to and identify individual pitches as high, middle, or low.

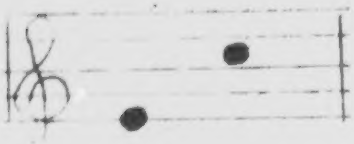
Folk Song

Shimmy, Shimmy Coke-Ca-Pop!



Singing Game

Here Come Another One



Listening

Moussorgsky. "The Gnome" from Pictures at an Exhibition. RCA Records, LSC-3278.

## LESSON FOUR

Objective

To touch and control the sound-producing instrument, i.e., the computer or the piano.

Computer Drill No. 4

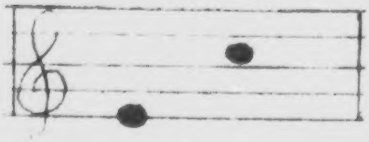
Students type in commands on the computer to run and to end one of the programs, High Pitch, Middle Pitch, or Low Pitch.

Piano Drill No. 4

Students play a piano pitch for another student to identify.

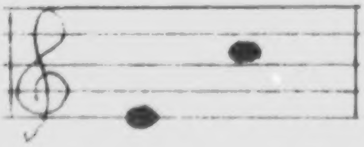
Folk Song

Mad Man



Singing Game

Ol' Bald Eagle



Listening

Bruce Mitchell. Passport Design Soundchaser Demonstration Record. EvaTone Soundsheets, Inc.

LESSON FIVE

Objective

To become more familiar with the sound-producing instruments, i.e., the computer or the piano.

Computer Drill No. 5

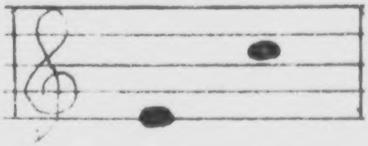
Students have an individual turn to play the game, Perky Pitch; they must run and end the program.

Piano Drill No. 5

Students have an individual turn to play Hot Cross Buns on the piano at a register of their choice.

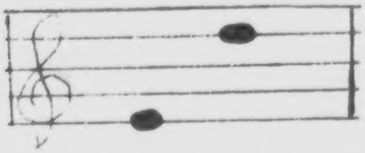
Folk Song

Cotton-Eye Joe



Singing Game

Jim Along Josie



Listening

Debussy. "Golliwogg's Cakewalk" from Children's Corner. Columbia MS 7361.

## LESSON SIX

Objective

To be able to conceptualize about high, middle, or low pitch register.

Computer Drill No. 5

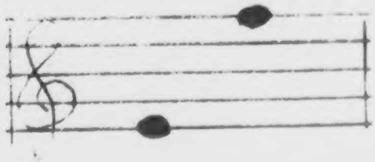
Continuation of Computer Drill No. 5

Piano Drill No. 5

Continuation of Piano Drill No. 5

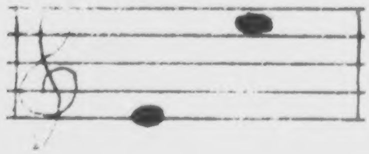
Folk Song

Jimmy Crack Corn



Singing Game

Old King Glory



Listening

Beethoven. Egmont Overture. Columbia CSM-433.

# NON-PARTICIPATION OF FRESHMEN AND SENIOR BOYS IN HIGH SCHOOL CHOIRS

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One problem that many high school choral directors face is enlisting boys to sing in their choirs. Although this may not be a problem for those directors who have a strong singing tradition in their school, or an extraordinary talent for recruitment, it is a problem dealt with by the majority of choral directors. It is not a new problem necessarily. A decade ago, Roe stated that "obtaining enough boys to maintain a good program is always a major problem" (1970, p. 16).

Prior to this study reasons for non-participation by boys were considered. The non-participating boys may dislike singing. They may consider singing and the idea of expressing emotions unmanly. This attitude may be coupled with feelings of singing incompetency.

Lack of interest in music might be another reason for not joining choir. Some boys may be unable to participate because of heavy class or work schedules. Still, other reasons might be suggested for non-participation. Perhaps none of the student's friends are in the group, the student's family did not encourage him to join, or the student dislikes the director or members of the group. Some may elect not to participate because they did not enjoy their previous musical experiences.

Music educators can only assume these are the reasons why boys do not join choir. There has been virtually no research to document that these in fact are the reasons why boys do not participate. This study was designed to ask boys about their reasons for not joining choir.

The problem of this study was to investigate reasons why high school boys do not join choir. The purpose of the study was to determine the rank order of a list of reasons for not joining choir from ratings of these items by freshmen and senior boys who were not in choir in six Kansas City suburban high schools.

There is a dearth of literature pertaining to the reasons why high school boys do not join chorus at the high school level. Furthermore, one is hard-pressed to find any studies on drop-out rates in the choral program. Due to the paucity of research related to choral drop-outs instrumental studies were considered in designing the investigation, particularly in determining the selected list of reasons and other questionnaire items. Dunlap's (1981) study of instrumental music drop-outs was used as a guideline for procedures to follow in developing and administering the questionnaire. Studies by Dunlap and Sobieski (1951) were considered in deciding on what design to use to determine the reasons and their degree of importance for non-participation.

## Method

A descriptive design was used for this study. The sample was a random selection of 72 freshmen and 72 senior boys (12 freshmen and 12 seniors from each school) who were not in choir (at the time of the study) in six high schools in the Kansas City suburban area. Data were generated through a questionnaire designed and personally administered by the researcher.

The first portion of the questionnaire was a list of eight reasons presented to the student for him to rate. This was followed by a set of general information questions presented verbally by the researcher, to obtain information about the student's musical background and attitudes about singing. The final portion of the questionnaire was another rating sheet, the same as the first, on which the student rated his reasons an additional time. The second rating was used to determine the rank order of reasons for not joining the choir. The researcher believed the second rating would be a truer indication of the students' rank order. It was hoped that after answering the general information questions, the student could more clearly define the relative importance of each reason. It was believed the student would think of past experiences that might have been overlooked when he first rated the reasons. The second rating was used if it was different from the first reason.

The questionnaire was presented in a personal interview with each subject. Almost all of the interviews took place in a quiet room with only the researcher and subject present. Each interview began with the researcher stating her name and giving a brief introduction as to the nature of the interview. The subject was given a list of eight reasons which the researcher explained as "reasons boys from other schools have given for not joining their high school choir." This phrase was used to reassure the subjects that others their own age have felt this way. The researcher then asked the subject to first read the list of reasons. When he finished reading, he was asked to rate each reason according to the degree of influence he thought it had upon his decision not to participate in choir. He was to mark a "3" on those reasons that were very important or had the most influence on his decision not to join choir; a "2" for those reasons that were somewhat important in his decision; and a "1" for those reasons that were of little or no importance in his decision not to join choir. After the reasons were marked, the researcher took the list from the subject and proceeded to ask the set of general information questions. Following this discussion, the subject was given another blank rating sheet and was asked to rate his reasons one more time. The average length of the interview was approximately eight minutes.

Data were analyzed for frequency distributions and crosstabulations. The Kruskal-Wallis One-Way Analysis of Variance was used to test for statistical significance.

## Results

In arriving at the rank order of reasons, a crosstabulation procedure was used first to determine the number of subjects who rated each selected reason as "not important," "somewhat important," or "very important." The next step in the rank ordering was to assign a weight to each of these categories. The more important the category was considered, the greater number of points assigned to it. A total weight was determined for each item. These weights then were used to rank the reasons in order of importance. The reason with the highest number of weighted points was ranked "1." The rank order of reasons for freshmen alone, seniors alone, and freshmen and seniors combined, is shown in Table 1.

In addition, the researcher thought it would be of interest to look at the number of subjects who rated each item as a "very important" reason for not joining choir. The precentage of all subjects who chose this response for each item is shown in Table 2.

The study tested four hypotheses. In the case of Hypothesis One, the Kruskal-Wallis One-Way Analysis of Variance indicated no significant difference (.05 level) in the rank order of reasons given by freshmen versus seniors. "My schedule is too full" was ranked the most important reason for not joining choir for both freshmen and seniors.

The second hypothesis predicted there would be no significant difference (.05 level) between the rank order of reasons given by boys who say their decision not to join choir was influenced by friends, boys who say their decision was influenced by family members, or boys who say this was their own decision. None of the boys said their decision was influenced by family members, six boys said their decision was influenced by friends, and 138 responded this was their own decision. Because of the lack of responses in two of these three categories, the validity of a statistical test would be in jeopardy, and thus was not performed.

Hypotheses 3 and 4 used the Kruskal-Wallis test for statistical significance. No statistically significant difference (.05 level) was found in the rank order of reasons as given by freshmen who had participated in choir and freshmen who had not. Likewise, no statistically significant difference (.05 level) was found in the rank order of reasons as given by seniors who had participated in choir and seniors who had not.

## Discussion

"My schedule is too full for choir" was cited as the most important reason for non-participation in high school choir. Forty-five percent of all subjects rated this item as a very important reason for not joining choir. Choral directors have to face the fact that work

Table 1

Rank Order of Reasons for Not Joining Choir for Freshmen alone, Seniors Alone, and Freshmen and Seniors Combined

| Item Number | Rank[a] Freshmen | Seniors | Combined |
|---|---|---|---|
| 1. "I feel I don't sing well enough" | 3 (130) | 2 (154) | 2.5 (284) |
| 2. "None of my friends are in the choir" | 6 ( 99) | 5 (113) | 6 (212) |
| 3. "My schedule is too full" | 1 (146) | 1 (165) | 1 (311) |
| 4. "I like to sing but I'm not interested" | 2 (136) | 3 (148) | 2.5 (284) |
| 5. "I didn't enjoy my previous musical experiences" | 4 (121) | 6 (110) | 4.5 (231) |
| 6. "My family didn't encourage me to join" | 7 ( 88) | 8 ( 92) | 8 (180) |
| 7. "I don't like to sing, I'm not interested" | 5 (116) | 4 (115) | 4.5 (231) |
| 8. "I don't like the director or the kids in the group" | 8 ( 83) | 7 ( 98) | 7 (181) |

[a] Numbers in parentheses indicate the total points calculated by the weighting procedure.

Table 2

Percentage of All Subjects Who rated Each Item as a "Very Important" Reason for Not Joining Choir

| Item Number | %[a] |
|---|---|
| 1. "I feel I don't sing well enough | 33.3 |
| 2. "None of my friends are in choir" | 11.1 |
| 3. "My schedule is too full" | 45.1 |
| 4. "I like to sing, but I'm not interested in the choir" | 29.2 |
| 5. "I didn't enjoy my previous musical experiences in school" | 13.9 |
| 6. "My family didn't encourage me to join" | 3.5 |
| 7. "I don't like to sing; I'm not interested" | 21.5 |
| 8. "I don't like the director or the kids in the group" | 6.9 |

[a] The total is more than 100% because some subjects ranked more than one item as a "very important" reason for not joining the choir.

and other interests consume much of the student's time. If a previous past musical experience was not rewarding, the student may elect to pass up the high school choral experience in favor of other activities that may seem more appealing. Whether he makes room for choir in an already full schedule may depend on what value he places on his past musical experiences.

The reasons next in order of importance were "I feel I don't sing well enough to be in the choir" which received the same weight as "I like to sing, but I'm not interested." One might expect boys who had not participated in choir to believe they do not sing well enough to be in the group. They may feel it is an elite group and that you already have to know how to sing before you get in. The choir director usually wants to choose the membership of his or her choirs, which sometimes means the singers who do not know how to sing can not get into the group to learn. There may not be another group for them to join where they could learn how to sing. Shoup (1973) asks "How many high school singers see the choral experience as a voice-class learning experience in which he may develop his own talent to the extent of his ability?" (p. 28) If this type of instruction is being offered by a choral program, do the students who really want to learn how to sing know about it?

Perhaps these feelings of singing incompetency stem from inadequate instruction in the earlier grades. The problem may need to be addressed at the elementary and Jr. High levels if it begins there. Some of the boys in this study said they did not enjoy their previous musical experiences: they did not like the songs in elementary school, they did not like the music activities, or they did not like their

Jr. High music experience. Perhaps music instruction needs to be changed or at least made more attractive at these levels. Shoup states "It is clear to me that there is a direct correlation between the quality of instruction and the amount of involvement in choral programs in the junior and senior high schools" (p. 29).

Other reasons expressed by the boys for their lack of interest in participating in choir included: they never started singing at an earlier age, they have other interests and priorities, or they have never been invited or encouraged to join by a choir member, choir director, school counselor, or other teacher. Of the 144 subjects interviewed for this study, only 30 said they ever had been approached to join the choir. Some boys commented that no one ever had encouraged them to join so they never gave much thought to it.

If a boy does not get involved as a freshman, chances are he will be lost to the program. Seniors commented to the researcher that at this age they felt it was too late to join choir. This suggests that if boys get involved at a young age, and musical experiences are satisfying, the chances will be greater the boy will maintain his interest and involvement in music through his high school years. This "I never got started in choir" response should not be taken lightly.

"I didn't enjoy my previous musical experiences" and "I don't like to sing, I'm not interested" were tied at the next level of the rank order.

The problem that initiated the study was to identify the reasons why high school boys do not join choir. The reasons given above apparently are the most important reasons for nonparticipation for the subjects of this study, and areas that choral directors should address.

This study suggests a need for future studies in this area. Replications of this study in other geographical locations, in suburban, innercity, or rural schools, would be valuable to the choral profession, and would support or refute the conclusions of this study which was limited in scope.

Other studies in the future could explore further the attitudes and feelings about the Jr. High and elementary music experience. A good number of boys reported that they enjoyed singing as a child, yet as they grow older some lose this feeling of enjoyment. This change of feelings could be attributed to the voice change or the unexpectedness of its occurrence; or it may be that the instruction in elementary and Jr. High school changes the boy's feelings about singing. Another area of exploration would be the drop-out problem in elementary and Jr. High choirs. Finally, the problem of feelings of singing incompetency might be examined.

## References

Dunlap, M. H., Jr. *A study of instrumental music drop-outs*. Masters thesis, University of Kansas, 1981.

Roe, P. F. *Choral music education*. Englewood Cliffs, N. J. Prentice-Hall, 1970.

Shoup, E. R. Reply to John Van Nice. *Choral Journal*, October 1973, pp. 28-29.

Sobieski, V. C. *A study of instrumental drop-outs of the Lawrence (Kansas) schools*. Masters thesis, University of Kansas, 1951.

# ABSTRACT

## A STUDY OF THE OPINIONS OF STUDENTS, PARENTS, TEACHERS, AND ADMINISTRATORS REGARDING OBJECTIVES OF CHORAL MUSIC EDUCATION IN KANSAS CITY, KANSAS HIGH SCHOOLS

T. Jeffrey Anderson, Doctor of Musical Arts
University of Missouri-Kansas City, 1983
(Currently Choral Supervisor, Kansas City, Kansas)

Advisor: June Thomsen Jetter

The purpose of this study was to examine the opinions of students, parents, teachers, and administrators regarding the importance of various stated and unwritten objectives of choral music in the high schools of the Kansas City Kansas Public Schools.

A questionnaire containing 35 objective statements was designed by the investigator. Twelve objectives were classified as stated objectives and 23 as unwritten objectives. To organize them into topical units, each objective was placed into one of the following categories: (a) Ability to value music as an important realm of human experience; (b) Ability to perform; (c) Ability to create music through composition, conducting, and improvisation; (d) Ability to identify and classify music historically and culturally; (e) Ability to identify elements and expressive controls of music; (f) Miscellaneous, nonmusic objectives which complement general objectives of school district; and (g) Miscellaneous, nonmusic objectives considered unworthy as educational objectives.

The responding sample included 158 students, 41 parents, 9 teachers, and 13 administrators. Scores from a Likert-type scale were coded and expressed as frequencies of low and high ratings

for each objective. Two null hypotheses were tested by chi-square for statistical significance using the Statistical Package for the Social Sciences (SPSS).

Of the 35 objectives, 8 were found to have statistically significant differences (.05 level). One was a stated objective, the remaining 7 were unwritten objectives. Accordingly, both hypotheses were rejected. However, 19 of the 35 objectives were rated generally high by all four respondent groups.

The study disclosed that all respondent groups were in general agreement about the importance of the stated objectives. It was concluded that further study was needed in regard to the objectives which had statistically significant differences.

The research indicated the respondents were in general agreement regarding the need to consider additional instruction in areas suitable for a general music class. It was recommended that an evaluation be made of the district's present curricula of elementary and middle school general music to determine their relationship to the deficiency in general music skills suggested by this study.

## ABSTRACT

## OÜVERTURE FÜR HARMONIEMUSIK OP. 24 BY FELIX MENDELSSOHN-BARTHOLDY: VOLUME I-II

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Advisor: Gerald Kemner

Every composition of original wind band music composed prior to 1900 is of significant interest to wind conductors actively engaged in developing artistic status for their ensembles. While those works by significant composers have been available in one or more editions for some time, the opportunity to prepare a new edition from a rediscovered autograph is significant since it makes possible an edition based upon first-hand material rather than sources that are second or third generation. The rediscovered 1826 autograph titled Nocturno op. 24 (Overture for Winds) by Felix Mendelssohn-Bartholdy presents such an opprotunity.

This study is divided into two parts. The first examines the historical background of the op. 24 and the rationale for a new edition. Through the translation of Mendelssohn's letters and other references, one can trace the op. 24 from its conception for the court orchestra of eleven winds at Bad Doberan near Rostock in 1824 to the 1838 rescoring for "Harmoniemusik" by Mendelssohn for the publisher Simrock. The letters also show Mendelssohn's desire for this composition to be published in Germany and England and documents the fact that Mendelssohn eventually lost both the original 1824 and recopied 1826 score of the op. 24.

Through a comparison of the 1826 and 1838 scores insight was provided into changes in: overall length, melody, harmony, articulations, and texture. This examination emphasized the continual need to consult the most original sources available since through various editions and printing, material is changed, added, or left out either by intention or neglect.

Part I also discusses the scoring concepts of specified instrumentation, orchestral concept of performance, single performer concept, and individual instrument tone colors. These concepts are the basis for the scoring of this edition of op. 24, and allow the editor to be directly responsible for all weights and balances of each individual voice. These same concepts are the basis of the 1826 autograph and it is shown that Mendelssohn approached his scoring using these concepts. This is followed by a discussion of the instrumentation selected for the new edition. The availability of the 1826 autograph has also made it possible to find a contemporary solution to the problem of the bass line in this composition, since it clearly indicates that the bass line is to be performed on an English bass horn and not the brass tuba as usually interpreted. Part I concludes with a description of the editorial procedures used in the preparation of the score. In the Appendix, English translations are provided for Mendelssohn's letters that relate to op. 24 and a copy of the 1826 autograph and Simrock score from which this new edition was constructed.

Part II is a performance edition score based upon the 1826 autograph and the Oüverture für Harmoniemusik, published by Simrock, and Breitkopf and Hartel. In addition to program notes, instructions are provided the conductor in a preface that discusses choices of instrumentation, editorial procedures, performance of measures in which a fermata appears, performance of turns, and the most effective performance of the percussion parts. The availability of the new edition of the op. 24 now allows a performance of this wind classic from the most authentic source known to date.

# ABSTRACT

## HEINRICH ISAAC AND NUMBER SYMBOLISM: AN EXEGESIS OF COMMEMORATIVE MOTETS DEDICATED TO LORENZO DE' MEDICI AND MAXIMILIAN I

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The importance of symbolic numbers--an all-pervasive concept in the Renaissance--is corroborated by this study of symbolism in Heinrich Isaac's motets *Quis dabit capiti*, *Quis dabit pacem*, *Virgo prudentissima*, *Sancti Spiritus* and *Imperii proceres*. The working method elucidated in this document can be applied profitably to other composers; in contrast to other studies done in this field, this is the first analysis to investigate thoroughly every aspect of number symbolism. All components of each composition--tactus, notes, words, syllables and letters--were considered both vertically and horizontally with respect to large form, sections, phrases and textual units. Additionally, symbolic aspects of word painting and *soggetto cavato* were investigated.

The document begins with an historical overview of number symbolism and a discussion of its importance in the Renaissance. Proportions important to Renaissance thought, such as golden mean, Fibonacci and Pythagorean, are defined, as well as the multiple meanings of symbolic numbers. Gematria, the science of considering the numerical value of words by assigning a number to each letter of the alphabet, is also discussed.

The analysis shows that not only did Isaac use numbers symbolically but indeed they were a motivating, structural force in his compositional technique. Number symbolism pervades every work analyzed. The golden mean proportion is consistently found to be the structural basis of these motets and was further utilized by Isaac to stress important words of the text. In *Quis dabit capiti*, the golden sections are identical both in Isaac's motet and Poliziano's poems, as well as those of the poets and the people for whom the motets were composed. Such names are stressed by the use of symbolic numbers associated with a particular individual; by gematria, often expressed by the total of all components; and by gabalistic numbers significant to the text.

This analysis further resolves problematical issues relating to form, conflicting editions, dating of compositions, and identification of poets, offering a convincing argument for the value of future research in this field.

## ABSTRACT

# MUSIC EDUCATOR PRACTICES AND ATTITUDES TOWARD MAINSTREAMING

Annie J. Gavin
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Chairman: Patrician K. Shehan

The purpose of this study was to assess the impact of Public Law 94-142, *The Education for All Handicapped Children Act of 1975*, on elementary general music programs within a midwestern school district and to isolate problems associated with mainstreaming handicapped students into music class. Areas of concern were

participation and consequent attitudes of music educators in the implementation of Individualized Education Programs (IEP) and teacher assessment of musical behavior of handicapped students as indication of appropriate placement in music programs through the mainstreaming process.

The sample consisted of 19 elementary music specialists in a suburban school system and 228 handicapped students mainstreamed into elementary general music classes within the same system. Music specialists were surveyed on issues concerning the implementation of PL 94-142, the IEP, and the effectiveness of the mainstreaming process. The specialists additionally evaluated handicapped students in mainstreamed music classes on the basis of observed performance in (1) singing, (2) rhythmic response, (3) note reading, (4) instrumental performance, (5) movement, and (6) participation in extra curricular music ensembles.

Results of the survey revealed that

1. Music educators are generally not familiar with specific aspects of PL 94-142 and do not participate in the formation of IEPs for handicapped students mainstreamed into music.
2. A majority of music specialists surveyed are dissatisfied with current mainstreaming processes.
3. The progress of handicapped students in music is not consistently evaluated by either the music specialist or the IEP team.
4. The major problems with mainstreaming as perceived by music educators are (a) the undefined role of music in the handicapped student's IEP, (b) the

undefined role of the music specialists in executing goals of the IEP, (c) the lack of information about specific disabilities and previous musical experiences of handicapped students, and (d) the absence of uniform procedures in evaluating the progress of handicapped students in music.

5. Although most handicapped students have had IEPs developed for their specific abilities, no IEPs in music have been formulated.
6. The activities most frequently used in mainstreamed classes are rhythmic and singing activities, and the aural-visual identification of notational symbols and instruments.
7. Music educators have observed improvement in the musical and non-musical skills of both handicapped and non-handicapped students as a result of mainstreaming.
8. Handicapped students were competent in rhythmic skills but were assessed at below grade level in other activities, including singing, notation, instrumental performance, and movement.

## ABSTRACT

## THE EFFECT OF IMPROVISATION IN GIVEN RHYTHMS ON RHYTHMIC ACCURACY IN SIGHT READING ACHIEVEMENT BY COLLEGE ELEMENTARY GROUP PIANO STUDENTS

David Ricardo Montano, Doctor of Musical Arts
University of Missouri-Kansas City, 1983
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Advisor: Jack R. Stephenson

The problem of this study was to determine whether college elementary group piano students who have regular practice in improvising the pitches for pieces within various combinations of given meter, rhythmic notation, texture, and pitch delimitations will show greater achievement of accuracy in sight reading fully notated pieces than similar students who do not have that practice.

An experimental pretest-posttest control group design was employed for generating data. Thirty-two undergraduate students from elementary group piano classes at the University of Denver served as subjects. Both groups received equivalent practice in sight reading fully notated music of four textural types. The experimental group also concurrently received a program of exercises for improvising pieces of those same four textural types in given rhythms while the control group did not. The experimental and control treatments were administered during sessions separate from the students' regularly scheduled class meetings. Sessions were held once per week over a span of six weeks.

Conclusions from the results of the data analysis were as follows:

1. The experimental group who had the improvisation practice showed significantly greater achievement of rhythmic accuracy in sight reading than the control group who did not have that practice.

2. There was no significant correlation between pitch and rhythmic accuracy achievements for the experimental group, but there was a significant correlation for the control group.

3. There was a significant correlation between rhythmic accuracy achievement and amount

of previous experience reading music instrumentally or vocally, but not between the achievement and amount of previous instruction in piano or between the achievement and previous instruction in college music theory.

4. There was no significant difference in rhythmic accuracy achievement between music majors and non-music majors and there were no significant differences among students from three piano course levels.

5. There was no significant correlation between rhythmic accuracy achievement and Leadership Index scores for the *California Psychological Inventory* or between that achievement via Conformance Scale scores for the *Inventory*.

## ABSTRACT

## THE CARL FLESCH VIOLIN SCALE SYSTEM: AN EDITION FOR CELLO

Peter Whitlock Lemonds, Doctor of Musical Arts
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Southern Mississippi University)

Advisor: Jack R. Stephenson

This project was designed to produce a cello edition of the Carl Flesch Violin Scale System. Since other pedagogical works for violin such as those written by Kreutzer, Paganini, and Sevcik have been transcribed for cello, and there exists no previous cello edition of the Carl Flesch Violin Scale System, it was deemed appropriate to produce an edition for cello. The purpose of the cello edition was to provide the cellist with the Scale System so that he may benefit from its practice as the violinists do.

The edition was prepared with an overall view of Carl Flesch pedagogy and pedagogical materials for the cello. The note patterns were transferred without change except where the physical limitations of the cello predicated a reduction and relocation of the violin original. Each scale was transferred to begin on the lowest possible note on the cello for that scale and continued at the same distance from the violin original throughout. The bowings were taken from the Scale System, Scale Exercises in All Major and Minor Keys for Daily Study by Carl Flesch. The edition includes three kinds of scales which are produced in complete form in the keys of C major, C minor, and E major; the remaining 21 scales are presented using the first section of each scale. This format provides the user with three examples of the basic forms which can then be preserved in transposition to the other keys and the various bowings of the remaining keys would be given. Fingerings have been given as a point of departure and should be considered variable after the basic fingerings have been learned.

Chapter I is an introduction to the project and Chapter II is a biographical sketch of Carl Flesch. The sketch gives the pedagogical background of his life, his works, and various comments about him by his colleagues. Chapter III contains an in-depth discussion of the technical principles of the Carl Flesch Violin Scale System as it relates to the cello edition. This is followed by Chapter IV which contains the manuscript of the cello edition.

## ABSTRACT

## PIERRE BOULEZ AND KARLHEINZ STOCKHAUSEN: THEIR PERIOD OF RAPPORT, RIVALRY AND AND SUBSEQUENT PARTING

Robert D. Scagliotti, Master of Music
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Advisor: Paul J. Revitt

In the late 1940s, Boulez, Stockhausen and others were searching for a new approach to the composition of music. They were united in their rebellion against the power structure but as they became aware the neoclassicism no longer exerted a great influence each felt free to pursue his individual ideas. Stockhausen's separation from Boulez occurred when the latter attempted to impose his brand of authoritarianism on that which formerly was wielded by the power structure.

Olivier Messiaen was an integral part of the evolution of serialism as well as the development of Boulez and Stockhausen during the late 1940s and early 1950s.

Following their studies with Messiaen, Boulez and Stockhausen met other young composers with whom they shared artistic goals. They came from the United States as well as various European countries. This period of the early 1950s was fertile and dynamic with fierce competition for innovative discoveries which resulted in ill feelings between individuals.

The focal point of the post war avant-garde was the summer institute at Darmstadt. It was begun modestly by Steinecke assisted by Fortner and Hindemith but it soon evolved into a gathering dominated by serialists advocating the aesthetics of Shoenberg and Webern.

By the mid-1950s this international coterie of avant-garde composers dissolved as each began following his separate path. Nationalistic biases soon arose which in the case of the

Americans was expressed by condescension or contempt by certain Europeans.

The provocation of the controversy, which had been smouldering since the early 1950s, was that of chance or aleatoric procedures. Each composer had his own definition and concept towards its application in music. Ironically it was Boulez who was then considered by others as being too rigid and tradition-bound. The break with the past was precisely what Stockhausen and some Americans were advocating. Morton Feldman, John Cage, and La Monte Young were exploring areas left uncharted by the Europeans sometimes to the annoyance and ridicule of Boulez and, later Stockhausen. Cornelius Cardew and Henri Pousseur, influenced by their Marxist beliefs, soon took their respective paths away from Boulez and Stockhausen.

## ABSTRACT

## THE THREE-VOICED MOTETS OF *PARADISUS SACRIS CANTIONIBUS* BY PETER PHILIPS: AN EDITION WITH COMMENTARY

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Advisor: LeRoy Pogemiller

The 107 motets of *Paradisus Sacris Cantionibus* have not previously been transcribed into modern notation. This dissertation contains the seventeen three-voiced motets of *Paradisus Sacris Cantionibus*, in an edition with commentary in order to add to the knowledge about Peter Philips as a composer of excellent vocal music.

The biography is brief and includes no new information, but does include a list of works. The sources of Paradisus Sacris Cantionibus are listed, as well as description of the part books.

Working from microfilm of the original part books, the vocal parts and continuo are arranged in five-staff format. Modern clefs are used, note values are halved and bar-lines added. Editorial additions were made on the basis of numerous reconciliations demanded by inconsistencies between the parts. The continuo consists of the two original parts and figures, both original and editorial.

The prints utilize white mensural notation, with the time signatures C and 3. Within the body of each motet, these signatures are in the proportion 2:3, or proportio sesquialtera. The tactus should lie between forty and fifty-five per minute, depending on practicability, the sense of the text and the harmonic and melodic qualities of each piece.

Two modal signatures are used--B♭ and no flats. Modes used are G Dorian, G Mixolydian, D Dorian and F Ionian.

The style of the seventeen motets is a mixture of stile nuovo and stile antico. The continuo essentially doubles the vocal parts. Slow polyphonic sections alternate with rapid solo and duet sections, as well as other combinations of these textures and tempi. The seventeenth-century term for this combination of old and new is stile misto.

The text of each motet is its primary organizational framework. Word painting and sudden changes of texture are used to portray vividly the texts. Repetition of sections as well as textures and tempi gives artistic coherence to the motets.

The texts of the motets, taken from a non-Roman breviary, appear to be antiphons or responds sung at Matins or Vespers. Two of the texts take as their subject the praise of the founders of the Jesuit movement, Ignatius of Loyola and Francis Xavier.

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4. Manuscript style should follow the Publication Manual of the American Psychological Association (3rd ed., 1983), which can be purchased from the American Psychological Association, 1200 Seventeenth St., NW, Washington, D.C. 20036.

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## PREFACE

The *Missouri Journal of Research in Music Education*, published by the Missouri Music Educators Association, is devoted to the needs and interests of teachers of music in Missouri and the nation. This issue, Volume V, Number 2, is the twenty-second.

The members of the editorial committee are grateful to those readers who have written suggestions concerning the content of past issues and request that criticisms and suggestions again be sent to the editor concerning the content of this issue. We strive for a reasonable balance among music theory, history, philosophy, aesthetics, and pedagogy.

We express our deep gratitidue to the Missouri Music Educators Association for their financial support to make it possible to continue to publish the *Missouri Journal of Research in Music Education*.

The Editorial Board

# EFFECT OF THREE TYPES OF MUSIC ON MOOD AND FEELINGS

Wanda B. Lathom & Bernard Lubin
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Larry Havlicek
University of Kansas-Lawrence

Many terms have been used to express human emotion. These include feelings, emotion, affect, and mood. Thus, it is necessary to use an operational definition. That adopted by Eagle (1971) is most appropriate:

> For purpose of this study, moods are operationally defined as transient feeling states, states, having aspects of emotions and affects, which can be cognized by individuals and designated with words. (p. 16)

"That music can affect and bring about mood changes is a commonly accepted fact among laymen as well as musicians" (Gaston, 1951, p. 42). The purpose of this study was to investigate the effect of music on descriptions of mood. Feeling states before and after listening to music were compared. This article provides a preliminary report on the procedure and instrumentation to be used in a series of studies of music and mood.

Mood is a pervasive phenomenon, present in all normal psychological functioning and very apparent in certain pathological conditions, such as the affective disorders. As a normal phenomenon, the importance of mood or affect was recently indicated by Bowers (1981) who demonstrated its influence on memory and by Hettena and Ballif (1981) who showed its effects on learning. Although it has been known for a long time that mood and affect are correlates of a number of psychological states and can be found among the reactions or consequences to a number of environmental events, it has been only relatively recent that the causal role of mood, particularly depressive mood, has been implicated in the development of psychophysiologic syptoms (Brenner, 1979).

"Humans learn to label or respond verbally to their conscious mood(s) and to discriminate the mood stimuli with thousands of adjectives and descriptive phrases (Wessman and Ricks, 1966, p. 12). Of the available methods for measuring mood, self-report has gained broad acceptance because of its relatively high reliability and validity, and because of its economy. The Depression Adjective Check List (DACL) (Lubin, 1981) has been used widely as a self-report measure both of trait (long eduring) and state (transient) depressive mood. The instrument consists of 34 adjectives, 22 "positive" adjectives, i.e., with depression connotations and 12 "negative" adjectives, i.e., with no depression connotations. The 34 adjectives are printed in two parallel columns of 17 adjective each, 11 "positive" and six "negative." The average split-half reliability, i.e., the correlation between the two parallel columns, has been determined to be .85 (Lubin, 1981). In addition, each column of 17 adjectives has been shown to have almost as high concurrent validity as the total list of 34 adjectives (Lubin, 1966). Thus, each column could be used as an alternate short form of the DACL. Subjects are asked to "check the words which describe How You Feel Now--Today." Half of the check list could be given before the subject listened to the music and half after the music. DACL scores could be compared to determine changes in mood or feelings, as indicated by adjectives selected.

Adjective check lists have been used for several years to describe the mood of music (Schoen and Gatewood, 1927; Gatewood, 1927; Heinlein, 1928; Gundlach, 1934, 1935; Hevner, 1935, 1936, 1937, 1939; Watson, 1942; Campbell, 1492; Hampton, 1945; Capurso, 1952; Sopchak, 1955; Van Stone, 1960). The study of most importance to the present research is one by Farnsworth (1954). He tested the internal consistency of the Hevner Adjective Circle. 2,145 rank-order correlations provided information abou the relationship among the 66 adjectives on Hevner's list. From this investigation, he reclustered the adjectives into the list on the next page (Table 1).

This list, like the original Hevner check list, still groups related adjectives and places related clusters in adjacent groups. Bonny and Savary (1973) used the Hevner adjective list to test consistency of subjects' descriptions of selections of music. Using their information, the present study utilized tape recordings that were described in three mood categories. The following categories and selections were used (see Table 2 next page).

## Design

### Subjects.

Ninety subjects were tested. They included an even distribution (N=45) on four characteristics:

Table 1

Farnsworth's Revision of the
Hevner Adjective List

A

cheerful
gay
happy
joyous
bright
merry
playful
sprightly

B

fanciful
light
quaint
whimisical

D

delicate
graceful
lyrical

D

dreamy
leisurely
sentimental
serene
soothing
tender
tranquil
quiet

D

longing
pathetic
plaintive
yearning

F

dark
depressing
doleful
gloomy
melancholic
pathetic
sad
serious
sober
solemn
tragic

G

sacred
spiritual

H

dramatic
emphatic
majestic
triumphant

I

agitated
exciting
exalting
exhilarted
impetuous
vigorous

J

frustrated

Table 2

Music Used

Tape 1: Playful, Gay (A, B, C)

Bach-Brandenburg Concerto #2, 3rd movement
RCA-VIC S-6023
J.S. Bach - The Six Brandenburg Concertos
by Collegivan Avreum

Beethoven-Concerto #3 for piano, 3rd movement
XLP20045
Beethoven Piano Concerto No. 3 in C minor,
Op 37 by Gabriel Tacchino
Cond. by Andre Clvytens

Haydn-Cello Concerto in C, 1st movement
SUA 10495
Joseph Haydn Concerto in C Major for Violin
Cello and Orchestra
Milos Sadlo (cello) Prague Radio
Symphony Orchestra
cond. by Alois Klima

Tape 2: Solemn, sad, tender, leisurely (D, E, F, G)

Sibelius-Swan of Tuonela
LPM 18974
Jean Sibelius-Der Schwan Von Tuonela Op. 22
NR.3
Berliner Philharmoniker
cond. by Herbert von Karajan

Table 2 (continued)

Humperdinck-Evening Prayer from Act II of Opera
Album: Clair de Lune
Philadelphia Orchestra
cond. by Eugene Ormandy

Haydn-Cello Concerto in C, 2nd movement
Milos Sadlo (cello) Prague Radio Symphony Orchestra
cond. by Alois Klima

Tape 3: Exciting, vigorous, frustrating (H, I, J)

Stravinsky-Rite of Spring Part II
RCA Victor LM 2085
Sacre du printemps (Rite of Spring)
Paris Conservatoire Orchestra
cond. by Pierre Monteux

Dukas-Fanfare from "La Peri"
Columbia 34201
Dukas: La Peri
New York Philharmonic
cond. by Pierre Boulez

Stravinsky-Firebird Suite, Finale
Capitol PAO - 8407
Stravinsky Suite from "The Firebird"
Berlin Philharmonic Orchestra
cond. by Leopold Stokowski

1) Sex: 45 male, 45 female,
2) College level: 45 graduate students, 45 undergraduates,
3) Age: 45 over age 30, 45 under age 30,
4) Major: 45 music majors, 45 nonmusic majors.

Thus, subject number one was described as "Male, graduate student, over 30, and music major."

All subjects were tested in the Psychology of Music Laboratory at the University of Missouri-Kansas City. It was assumed that all had normal hearing ability and were in good physical and mental health.

## Equipment and Materials

The music was played on an Akair 4000 tape recorder connected to high quality speakers. All tapes were played at a similar decibel level of loudness. Each tape lasted approximately 15 minutes and was recorded on high quality equipment to avoid clicks or other distracting noises. Form E of the DACL was used.

## Procedure

Each subject was seated in a comfortable chair in front of a table. The first half of the check list was presented and the subject was allowed a maximum time of 15 minutes to complete information on the form and to check their responses. The student giving the test read the instructions for each 15 minute segment, then went to another part of the room and read so the subject would not feel that he/she was being observed. Music was played for the next 15 minutes, while the subject listened. A third of the students (N=30) listened to Tape I, a third to Tape II, and a third to Tape III. The last 15 minutes was allowed for the subject to check the last half of DACL Form E.

In order to dimensionalize the music variable, the findings of Farnsworth (1945) and Bonny and Savary (1973) were utilized regarding adjectival descriptions of music selections. The subject was then given the Farnsworth's Revision of the Hevner Adjective check list and was asked to check to category and adjective that best described the music. Thus, it was possible to determine that the subjects used the same adjective groups to describe the music as was reported in the research of Bonny and Savary (1973).

## Scoring and Analysis

The DACL was scored by music therapy graduate students who were trained by Dr. Lubin. The scores from Age, Sex, Educational Level, and Major were analyzed by an Analysis of Variance with Repeated Measures. (Biomedical Program 2V, 1981). t-tests were used to analyze difference in mean responses before and after each type of music and total group before and after music mean scores. Chi square was used to test descriptions of the music, as indicated by adjectives selected from the checklist, as expected from the research of Bonny and Savary (1973).

## Hypotheses

The following hypotheses were tested:

1. There will be no significant difference in mood, as indicated by responses on the DACL,

when responses from before the music are compared with those after the music.

2. When responses after listening to Tape I, Tape II and Tape III are compared, there will be no significant difference.

3. There will be no significant interaction between mood responses on the DACL, type of music, and characteristics of the subjects (age, college level, sex, or major).

The .05 level of significance was used.

## Conclusions

None of the hypotheses tested were rejected. There were no significant differences in mean scores from the DACL given before and after any of the three types of music or when all before and after scores were combined.

Variables of age, sex, music or nonmusic major, and graduate or undergraduate status did not interact. All groups responded to the music in a similar way.

When subjects were asked to choose the adjective that best described the music, they usually chose the categories that had been anticipated.

Table 3

Mean Scores on the DACL

| | $\bar{X}$ Before | S.D. | $\bar{X}$ After | S.D. | Total* |
|---|---|---|---|---|---|
| Age | | | | | |
| Under 30 | | | | | |
| Tape I | 3.33 | (2.09) | 3.80 | (2.27) | 3.57 |
| II | 4.13 | (3.18) | 4.53 | (3.20) | 4.33 |
| III | 4.07 | (3.79) | 3.80 | (3.17) | 3.93 |
| Over 30 | | | | | |
| Tape I | 3.20 | (3.10) | 3.20 | (2.93) | 3.20 |
| II | 4.13 | (3.42) | 3.87 | (2.83) | 4.00 |
| III | 3.13 | (2.50) | 2.40 | (2.20) | 2.77 |
| College Level | | | | | |
| Undergraduate | | | | | |
| Tape I | 3.13 | (3.13) | 3.67 | (3.67) | 3.40 |
| II | 4.47 | (4.47) | 4.93 | (4.93) | 4.70 |
| III | 4.47 | (3.56) | 3.80 | (3.26) | 4.13 |
| Graduate | | | | | |
| Tape I | 3.40 | (3.40) | 3.33 | (3.33) | 3.50 |
| II | 3.80 | (3.80) | 3.46 | (3.47) | 3.63 |
| III | 2.73 | (2.60) | 2.40 | (2.06) | 2.57 |

*Before and After scores combines)

Table 3 (continued)

|  | $\bar{X}$ Before | S.D. | $\bar{X}$ After | S.D. | Total* |
|---|---|---|---|---|---|
| Sex |  |  |  |  |  |
| Male |  |  |  |  |  |
| Tape I | 2.53 | (1.92) | 3.53 | (2.53) | 3.03 |
| II | 4.53 | (3.64) | 4.20 | (3.47) | 4.37 |
| III | 2.93 | (2.79) | 4.27 | (3.51) | 3.60 |
| Female |  |  |  |  |  |
| Tape I | 4.00 | (3.02) | 3.47 | (2.75) | 3.73 |
| II | 3.73 | (2.87) | 4.20 | (2.54) | 3.97 |
| III | 4.27 | (2.19) | 3.87 | (3.14) | 4.07 |
| Major |  |  |  |  |  |
| Music |  |  |  |  |  |
| Tape I | 3.80 | (3.14) | 3.40 | (2.50) | 3.60 |
| II | 4.27 | (2.94) | 4.13 | (2.10) | 4.20 |
| III | 3.67 | (2.50) | 3.33 | (2.55) | 3.50 |
| Non music |  |  |  |  |  |
| Tape I | 2.73 | (1.87) | 3.60 | (2.77) | 3.17 |
| II | 4.00 | (3.63) | 4.27 | (3.75) | 4.13 |
| III | 3.53 | (3.85) | 2.87 | (3.04) | 3.20 |
| Total Group |  |  |  |  |  |
| Tape I | 3.27 |  | 3.50 |  | 3.38 |
| II | 4.13 |  | 4.20 |  | 4.17 |
| III | 3.60 |  | 3.10 |  | 3.35 |

As can be noted from the responses in Table 4, the majority of the subjects responded to the mood of the music in the anticipated way. The chi square analyses indicated that the responses were significantly different from a chance response for Tapes II and III, and for all subjects combined. For Tape I, the resposnes followed the preferred mood, but the chi square for this analysis was not significant. Thus, it can be concluded that the subjects perceived the mood of the music in the anticipated way, but their mood was stable and did not change as a result of listening to any of the three types of music.

Since these people lived in the community and were able to function in community and college life, their initial mood generally was happy or satisfactory, as indicated by the scores on the first half of the DACL. Only 10 of the 90 subjects scored in a range that would indicate depression. Thus, it is unlikely that great change would occur from listening to 15 minutes of music. However, this provides important baseline data for further research into the effect of music on the mood of subjects who are not able to function in the community and who have mood related disabilities. Other questions to be considered in further research include:

1. Is there a greater change in mood if preferred music is used?
2. If the mood of the subject, as identified on a pretest, is matched with the mood of the music, will there be a mood change?
3. If the initial mood of the music is matched with the subject's mood, and then gradually shifted to a different mood, will subject's mood follow the direction of the

Table 4

Observed and Expected Choice of Adjectives to Describe the Music

| Tape | 0 | E | 0-E | $(0-E)^2$ | $\frac{(0-E)^2}{E}$ | P |
|---|---|---|---|---|---|---|
| I-Playful, Gay | 19 | 15 | 4 | 16 | 1.07 | |
| (A,B,C) | 11 | 15 | 4 | 16 | 1.07 | |
| | | | | | 2.14 | > .05 |
| II-Solemn, Sad | 22 | 15 | 7 | 49 | 3.27 | |
| Tender, Leisurely | 8 | 15 | 7 | 49 | 3.27 | |
| (D,E,F,G) | | | | | 6.54 | <.05* |
| III-Exciting, Vigorous | 23 | 15 | 8 | 64 | 4.27 | |
| Frustrated (H,I,J) | 7 | 15 | 8 | 64 | 4.27 | |
| | | | | | 8.54 | <.01** |
| Total | 64 | 45 | 19 | 361 | 8.02 | |
| | 26 | 45 | 19 | 361 | 8.02 | |
| | | | | | 16.04 | <.01** |

shift?

4. Will subjects who are diagnosed as depressed respond differently to the music, as indicated by before and after music responses on the DACL?

## References

Bonny, H.L. & Savary, L.M. (1973). Music and your mind. New York: Harper and Row.

Bower, G.H. (1981). Mood and memory. American Psychologist, 36, 129-148.

Brenner, B. (1979). Depressed affect as a cause of associatd somatic problems. Psychological Medicine, 9, 737-746.

Campbell, I.G. (1942). Basal emotional patterns expressible in music. American Journal of Psychology, 55, 1-17.

Capurso, A. (1952). The Capurso study. Music and Your Emotions. New York: Liveright Publishing Corporation.

Eagle, C.T. (1971). Effects of existing mood and order of presentation of vocal and instrumental music on rated mood responses to that music. Unpublished doctoral dissertation, University of Kansas, Lawrence.

Farnsworth, P.R. (1954). A study of the Hevner adjective list. Journal of Aesthetics and Art Criticism, 13, 97-103.

Gaston, E.T. (1952, February-March). Dynamic music factors in mood change. Music Educator Journal, 37, 42-44.

Gatewood, E.L. (1927). An experimental study of the nature of musical enjoyment. In M. Schoen (Ed.) The Effects of Music. Freeport, New York: Books for Library Press.

Gundlach, R.H. (1934). An analysis of some musical factors determining the mood characteristics of music. Psychological Bulletin, 31, 592-592.

Gundlach, R.H. (1935). Factors determining the characteristics of musical phrases. American Journal of Psychology, 47, 624-643.

Hampton, P.J. (1945). The emotional element in music. Journal of General Psychology, 33, 237-250.

Heinlein, C.P. (1939). The affective character of music. Proceedings of the Music Teachers National Association, 218-226.

Hettena, C.M. & Ballif, B.L. (1981). Effects of mood on learning. Journal of Educational Psychology, 73, 505-508.

Hevner, K. (1935). The affective characer of major and minor modes in music. American Journal of Psychology, 47, 103-118.

Hevner, K. (1936). Experimental studies of the elements of expression in music. American Journal of Psychology, 48, 246-268.

Hevner, K. (1937). The affective value of pitch and tempo in music. American Journal of Psychology, 49, 621-630.

Hevner, K. (1939). Studies in expressiveness of music. Proceedings of the Music Teachers National Association, 199-217.

Lubin, B. (1966). Fourteen brief lists for the measurement of depression. *Archives of General Psychiatry*, *15*, 205-208.

Lubin, B. (1981). *Depression Adjective Check Lists: Manual*. Second Edition, San Diego: Educational and Industrial Testing Service.

Schoen, M. & Gatewood, E.L. (1927). The mood effects of music. In M. Schoen (Ed.) *The Effects of Music*. Freeport, New York: Books for Libraries Press.

Sopchak, A.L. (1955). Individual differences in responses to different types of music in relation to sex, mood, and other variables. *Psychological Monographs*, *69*(11), 1-20.

Van Stone, J.K. (1960). The effects of instrumental tone quality upon mood response to music. In E.H. Schneider (Ed.) *Music Therapy 1959*. Lawrence, Kansas: The Allen Press for the National Association for Music Therapy.

Watsen, K.B. (1942). The nature and measurement of musical meanings. *Psychological Monographs*, *54*(2), 1-43.

Wessman, A.E. & Ricks, D.F. (1966). *Mood and personality*. New York: Holt, Rinehart and Winston, Inc.

# THE EFFECT OF THE USE OF MUSIC SPEED READING ON THE SIGHT READING ABILITY OF SENIOR AND JUNIOR HIGH SCHOOL INSTRUMENTALISTS

by

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The ability to sight read accurately is one of the abilities expected of most fine instrumental musicians. Developing this ability is, therefore, an important part of an instrumentalist's musical training. The quality of an instrumentalist's music reading ability depends on several factors including knowledge of notation, the ability to choose and execute appropriate physical responses to produce the right sounds on the instrument, and the ability to maintain a proper tempo. As the speed and complexity of the music increases it is likely that other factors such as the efficiency of eye movements and the ability to perceptually organize notation into workable note groupings (rather than reading one note at a time) become vital to successful reading.

The use of tachistoscopic presentation of note groupings in order to develop the student's ability to perceive groups of notes as a unit has met with mixed success. Flash cards have also been used for the same purpose. A major problem with the tachistoscope and flash cards is the fact that students are unable to use them at home in their daily practice.

A recent publication, Music Speed Reading (Hickman, 1979), was designed to develop the ability of instrumentalists to read music efficiently. Hickman states in the introduction to the book, "through the systematic lessons contained in this book the reader will be able to recognize grouped patterns of notes and symbols, thus enhancing the speed and accuracy of note reading."

Music Speed Reading is forty-three pages in length and divided into three parts. Part I consists of a series of ten one-page lessons. Each of these lessons contains nine staves with twenty-four "dot notes" per staff. Dot notes (see Figure 1 and 2) are written without stems or flags. The pitches are arranged in a pseudo-random order and are not intended to be melodic in any traditional sense. No clefs are used since the book is intended to be used with any common instrument. Five of these lessons use accidentals, the other five do not. The student is instructed to practice each lesson while imposing various rhythmic groupings to the notes. The prescribed groupings are shown in Figure 3. The use of a metronome during practice is suggested. Variants in the use of these exercises include the imposition of various key signatures, transposition, and playing in canon with the teacher.

Figure 1
A sample line from lesson 8

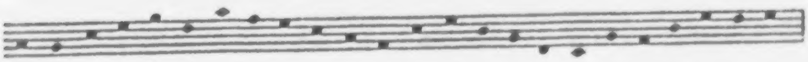


Figure 2
A sample line from lesson 10

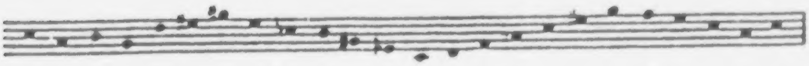
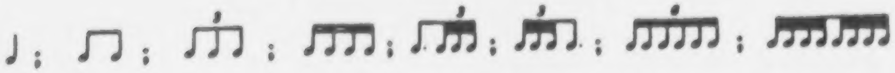


Figure 3
Assigned note groupings for Part I



Part II of Music Speed Reading (lessons 11-22) focuses on rhythm. As in Part I, only dot notes are used. The student is to perform the correct rhythms by perceiving rhythmic groups while using note spacing and bar lines as cues (see Figures 4 and 5).

Figure 4
First line of lesson 15

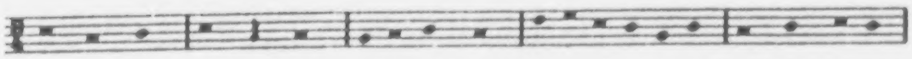
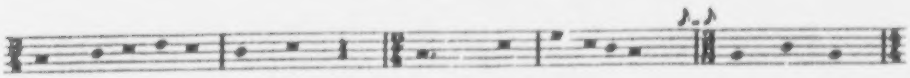


Figure 5
First line of lesson 21



Part III contains eighteen pages of etudes and duets using normal notation but without clefs and key signatures. The present study does not include Part III.

In this study, the effect of the use of Music Speed Reading on sight ability was examined. In doing so an attempt was made to answer the following questions:

1. To what extent does ten weeks' practice using Music Speed Reading affect sight reading performance of high school aged instrumental students taking private lessons?

2. To what extent does ten weeks' practice using Music Speed Reading affect the sight reading performance of junior high school aged instrumental music students taking private lessons?

## METHOD

### Subjects

Seventy-four instrumental music students were the subjects in this study. The sample included forty-four high school aged students (grades ten through twelve), and thirty junior high school aged students (grades seven through nine). After the pretest the number of subjects was reduced to fifty since several were unable to meet a minimum sight reading performance level. This resulted in the following instrumentation:

| Instrument | High School | Junior High |
|---|---|---|
| flute | 8 | 4 |
| clarinet | 16 | 4 |
| piano | 2 | 0 |
| violin/viola | 8 | 8 |

Each of these students lived in the Champaign, Illinois area and was a private student of one of five private teachers who cooperated in the study.

### Instrumentation

Three sight reading tests were used in this study: the Watkins-Farnum Performance Scale, Form A (WFPS-A), the Watkins-Farnum Performance Scale, Form B (WFPS-B), and the Farnum String Scale (FSS). These tests are similar in format, scoring, and difficulty. Each test consists of fourteen melodies, the first of which contains only half notes and whole notes in a limited range. Subsequent melodies are increasingly difficult. Performance of each melody is judged for pitch, articulation, tempo, rhythm, and adherence to expression markings. The student's score depends on the accuracy of the performance. When a minimum criterion of accuracy is not met in two successive melodies the student is not allowed to continue.

### Design and Procedure

The data from the senior high sample and the junior high sample were analyzed separately. In each case a two group design with pretest and posttest was used. The WFPS-A (for wind players) and the FSS (for string players) were used as pretests. Participating pianists were tested using the WFPS-A saxophone part; the test included only melodic playing without contrapuntal or harmonic elements. Because of time considerations the junior high students were started on the fifth of the fourteen melodies in the pretest and the high school students started on the seventh melody. The tests were recorded and scored independently by two judges whose scores were averaged. Identification numbers were used on the tapes such that the judges could not know whose performance was being judged.

After the pretests were scored the students were matched by instrument and pretest score. In each matched pair one subject was assigned to the experimental group and the other to the control group. Junior high students who were unable to achieve the minimum performance criterion in the fifth melody of the pretest were removed from further consideration in the analysis, as were those students with whom they had been matched. Likewise, those high school students unable to achieve the minimum criterion for scoring on the seventh melody were removed from consideration in the analysis of the results, as were those students with whom they had been matched. This reduced the sample size to fifty subjects. (It should be understood that *Music Speed Reading* might still be a useful tool in the development of sight reading skills for students of lesser ability than used in the experiment. The students failing to meet a minimum score on the *pretest* were eliminated only because an accurate pretest score was indeterminable since scoring began on the fifth or seventh test melodies.)

The twenty-five students who were assigned to the treatment group were given copies of *Music Speed Reading* and their private teachers were given instructions on how the book was to be used. The teachers were to assign two lessons per week. Lessons one and eleven were to be practiced during the first week, lessons two and twelve the second week, and so forth until the ten week treatment period was over. The teachers were asked to spend about ten minutes per weekly lesson reviewing the assigned material in the book.

For the twenty-five control group subjects the teachers were to work on sight reading in whichever way they were accustomed. It was suggested that equal time be spent for experimental and control group subjects. Each teacher was contacted three times by telephone during the course of the ten weeks' treatment to make sure the treatment was being carried out and to answer questions.

At the conclusion of the treatment the WFPS-B and the FSS were given as a posttest. The same administration and scoring procedures were used as had been used in the pretest. To determine whether any measured treatment effect was statistically significant the differences between the two groups' mean regressed gain scores were analyzed by means of a t-test. The high school and junior high school groups were analyzed separately. An alpha level of .05 was set for each analysis.

## RESULTS

The group means, standard deviations, and pretest-posttest correlations for the high school aged subjects are found in Table 1. The mean pretest scores for both the experimental and control groups were approximately nineteen points. In the posttest the experimental group mean score was 36.35 while the control group mean was 20.47. Experimental group subjects showed an average gain of 17.35 points as opposed to 2.00 points for control group subjects.

Table 1

Means, Standard Deviations, and
Pretest-Posttest Correlations
for High School Aged Subjects

| | | PRETEST | | POSTTEST | | | |
|---|---|---|---|---|---|---|---|
| Group | n | Mean | SD | Mean | SD | Mean Gain Score | Pre-Post Test r |
| Experimental | 17 | 19.0 | 14.3 | 36.4 | 17.7 | 17.4 | .93 |
| Control | 17 | 18.5 | 10.6 | 20.5 | 9.3 | 2.0 | .85 |
| Combined | 34 | 18.7 | 12.4 | 28.1 | 16.2 | 9.4 | .77 |

The data were tested for statistical significance by a t-test on regressed gain scores as suggested by Kerlinger (1973). The regressed gain score is the difference between the actual posttest score and the posttest score as it would be predicted from the pretest by linear regression. This method is slightly more powerful statistically than analyzing simple gain scores. The results are shown in Table 2. The value of t was 7.09 which is significant beyond the .001 level. This indicates that the difference in gain scores is so large that it could be attributed to chance less than one time in a thousand, therefore it must be concluded that the treatment had a positive effect.

Table 2

t-Test for Significance Between Mean Regressed Gain Scores for High School Aged Subjects

| Group | n | Mean R.G.S. | SD of R.G.S. | t |
|---|---|---|---|---|
| Experimental | 17 | 7.67 | 6.88 | 7.09* |
| Control | 17 | -7.67 | 5.74 | |
| Combined | 34 | 0.00 | | 9.98 |

*Significant at .001

Table 3 summarizes the results for the junior high school aged subjects. The mean pretest scores for the experimental and control group subjects are 19.6 and 17.6 respectively. Students having received the experimental treatment gained an average of 17.3, bringing their posttest mean to 36.9. Control group subjects gained an average of 4.8 points and had a mean posttest score of 22.4. Improvement for the experimental group subjects was 12.5 points greater than that of control groups subjects. Although these scores are similar to those of the high school aged subjects it should be pointed out that the older subjects started at a more advanced part of the pretest. Had all subjects started on the same part of the pretest the high school students' scores would likely be ten to twenty points higher than those of the junior high students.

Table 3

*Means, Standard Deviations, and Pretest-Posttest Correlations for Junior High School Aged Subjects*

| | | PRETEST | | POSTTEST | | Mean Gain | Pre-Post Test |
|---|---|---|---|---|---|---|---|
| Group | n | Mean | SD | Mean | SD | Score | r |
| Experimental | 8 | 19.6 | 10.8 | 36.9 | 14.4 | 17.3 | .69 |
| Control | 8 | 17.6 | 10.2 | 22.4 | 12.1 | 4.8 | .49 |
| Combined | 16 | 18.4 | 10.2 | 29.6 | 14.9 | 11.0 | .56 |

The data were tested for statistical significance by a t-test using regressed gain scores (Table 4). The value of t was 2.41 which indicates significance at the .05 level. *Group gain score differences as large as those found in this sample would occur by chance less than five times in one hundred.*

Table 4

t-Test for Significance Between Mean Regressed Gain Scores for Junior High School Aged Subjects

| Group | n | Mean R.G.S. | SD of R.G.S. | t |
|---|---|---|---|---|
| Experimental | 8 | 6.42 | 10.46 | 2.41* |
| Control | 8 | -6.42 | 10.85 | |
| Combined | 16 | 0.00 | 12.24 | |

*Significant at .001

Tables 5 and 6 summarize the results of the study according to instrument. These data show greater improvement among those who received the experimental treatment compared to the control sample in every subgroup except the junior high school clarinets. It should be noted that the sizes of these subgroups, especially the junior high flutes and clarinets, tend to be so small that specific conclusions concerning them should be viewed with great caution.

## CONCLUSIONS

1. For the high school aged subjects a significant difference in sight reading development over a ten week period was found. Those who used Music Speed Reading during that period of time improved their sight reading skills at a faster rate than the control group subjects.

Table 5

Summary Data According to Instrument (High School)

| Instrument | Group | n | PRETEST Mean | PRETEST SD | POSTTEST Mean | POSTTEST SD | Simple Gain Score |
|---|---|---|---|---|---|---|---|
| Flutes | Experimental | 4 | 22.8 | 16.6 | 43.8 | 22.7 | 21.0 |
|  | Control | 4 | 22.3 | 12.3 | 27.0 | 7.4 | 4.8 |
| Clarinets | Experimental | 8 | 20.9 | 13.5 | 38.8 | 12.4 | 17.9 |
|  | Control | 8 | 19.8 | 11.3 | 20.4 | 8.1 | 0.6 |
| Violin/ Viola | Experimental | 4 | 14.8 | 16.8 | 30.8 | 21.0 | 16.0 |
|  | Control | 4 | 16.3 | 5.2 | 19.3 | 7.7 | 3.0 |
| Piano | (only two were involved in the study) |  |  |  |  |  |  |

Table 6

Summary Data According to Instrument (Junior High School)

| Instrument | Group | n | PRETEST Mean | PRETEST SD | POSTTEST Mean | POSTTEST SD | Simple Gain Score |
|---|---|---|---|---|---|---|---|
| Flutes | Experimental | 2 | 22.5 | 2.1 | 36.5 | 9.2 | 14.0 |
|  | Control | 2 | 29.5 | 13.4 | 25.5 | 0.7 | -4.0 |
| Clarinets | Experimental | 2 | 15.0 | 7.1 | 22.5 | 14.9 | 7.5 |
|  | Control | 2 | 14.5 | 3.5 | 31.0 | 8.5 | 16.5 |
| Violin/ Viola | Experimental | 4 | 20.5 | 15.2 | 44.3 | 13.1 | 23.8 |
|  | Control | 4 | 13.3 | 7.4 | 16.5 | 14.6 | 3.3 |

2. A significant difference between the experimental and control groups was found in the study of junior high school aged subjects. Those who used Music Speed Reading improved their sight reading skills more than did the control group subjects.

For both age levels the results not only produced statistical significance but also indicate considerable practical statistical significance. Experimental group subjects at each age level and within each instrument group showed improvement. Overall, the treatment led to a mean gain of over seventeen points between the pretest and posttest as opposed to a mean gain of about three points for the control subjects. It is evident that a gain of seventeen points in these tests over a ten week period of time is a considerable rate of improvement.

It should be pointed out that the control group subjects were not given any prescribed treatment other than the material normally assigned by their private teachers. The novelty of the use of Music Speed Reading in their lessons (the Hawthorne effect) may have been responsible for some of the experimental group's improvement. But the main implications of this study were that sight reading ability can be improved at a rapid rate, and it is likely that Music Speed Reading is a particularly effective tool in the development of sight reading skills.

## References

Farnum, G. The Farnum String Scale. Winona, Minn.: Hal Leonard Music, Inc.

Hickman, D. (1979). Music Speed Reading. Century City, Cal.: Wimbledon Music, Inc.

Kerlinger, F. (1973). Foundations of behavioral research. New York: Holt, Rinehart, and Winston, Inc.

Watkins, J., & Farnum, S. (1954). The Watkins-Farnum Performance Scale. Winona, Minn.: Hal Leonard Music, Inc.

# THE COLLEGIUM MUSICUM AS A VIABLE PERFORMING GROUP ON THE TECHNOLOGICAL CAMPUS

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## Introduction

During the last decade, the Collegium Musicum has become an established performing medium on increasing numbers of college and university campuses. As Kottick Suggests in *The Collegium Musicum: A Handbook,* the growth of the Collegium parallels a developing interest of the general listening public in all areas of early music performance from the Middle Ages through the Baroque. The increase in professional performances of early music and in numbers of professional chamber groups specializing in early music has spawned a similar activity in the ranks of the amateur and semi-professional, whose needs are now met by a growing industry of instrument builders, music publishers, and amateur societies devoted to the betterment of a particular instrument and its devotees. Such activity is not confined to metropolitan areas and major universities, but is enjoyed by amateur musicians throughout the country.

While the recent growth of the Collegium Musicum within the environment of the professional school of music is logical, can this student performing medium be sustained on the college or university campus which has no musicology department and operates with a skeletal faculty of ensemble conductors and classroom instructors? This paper recommends one means by which the student performing Collegium Musicum has been made accessible to the non-major music student on a major Midwest technological university campus.

## The Technological Campus

Established in 1870 with the primary purpose of providing support to Missouri's mining and construction industries, the University of Missouri-Rolla has developed into a major contributor of professionally trained engineers to the nation. Due to the expansion and diversity of the nation's economy, UMR presently ranks seventh nationally in Bachelor of Science engineering degrees granted and is considered the largest engineering school west of the Mississippi River. It is a medium-sized campus of approximately 7,000 students, over 20% of whom are women.

Being one of a large four-campus university system, the Rolla campus is located in south central Missouri within 100 miles of St. Louis, Columbia, and Springfield. The city has a population of approximately 15,000, many of whom are employed by the University, the United States Geological Survey, the United State Bureau of Mines, the Missouri Geological Survey, or any one of several similar governmental agencies.

Throughout most of the school's history, the music performance offerings, either curricular or extra-curricular, have included a band and a men's glee club. Since 1970, the offerings have been expanded to include two mixed choirs, various bands, and an orchestra, with jazz bands being added to the curriculum in 1977. In 1978, a consort of recorders and Renaissance flutes, a bass dulcian and a soprano shawm were purchased. Interested students were given cursory instruction and the resulting ensemble was added to the existing Chamber Choir for inclusion in the annual Christmas Madrigal Dinner production. This performing group of singers and instrumentalists, now referred to as the UMR Collegium Musicum, continues to grow and is now part of the regular curricular offerings in music.

In general, UMR students participate in performance groups for at least one of two basic reasons: one reason is the tedium of the scientific and technological curriculum requires regular diversion and the other is that many aspiring engineers wish to further develop an existing talent or broaden their present musical performance experience. While students' practice and rehearsal time is sharply limited, their creative needs, motivation, and intellectual abilities are often exceptional.

## The UMR Collegium Musicum

Since the term came into fairly common usage in the German speaking states of sixteenth century Europe, the Collegium Musicum often has had a strong affiliation with academia. While groups of students, faculty, and amateur musicians frequently were predisposed to instrumental music, many Collegia were associated with a church or cathedral. The most famous example of church affiliation would be the Leipzig Collegium Musicum which flourished under Kuhnau (1688), Telemann and Johann Sebastian Bach (1729-39). The German Collegium tradition was continued in America in the eighteenth century by the Moravian communities of Pennsylvania, Ohio and North Carolina. Some of these collegia eventually developed into philharmonic societies and were the starting point for some of the professional orchestras which continue to the present day.

The revival of the collegium musicum in this century is credited to H. Riemann at the University of Leipzig in 1909, with the inclusion of historical instruments being attributed to W. Gutlitt of the University of Freiburg around 1920. The work of Carl Dolmetsch in historical instrument reconstruction and the performance of early music on historical instruments has had a significant impact upon the development of the collegium musicum.

A singular, all-encompassing definition of the modern collegium musicum as it presently exists on American college and university campuses is impossible, owing to the many differences in size, repertoire, purpose, personnel and other characteristics that exist among these groups. Following an extensive survey largely conducted *in vivo* in 1974, Kottick desribes nine types of early music groups with a college or university affiliation. The types of collegia encountered by Kottick vary from the small, independent ensemble that exists outside the direct influence of a formal director to the larger sub-ensemble group which may include several consorts under the direction of one or more faculty.

The Collegium Musicum developed at UMR since 1978 follows the pattern of the sub-ensemble collegium as described by Kottick. While the acquisition of instruments continues each year, the following description includes projected procurements for fall 1983.

The collegium consists of fifteen singers and a like number of instrumentalists designated the Madrigal Singers and King's Musicke, respectively. Each of these groups is comprised of a septet, quintet, and quartet. The vocal consorts include the Criers and Friars (SmSA and TBarB), King's Table SSATB), and Court Singers (SATB). The instrumental consorts include the Queen's Consort of Viols and Divers Strings (six), Court Players (five woodwinds), and Waytes (four sackbutts). In addition to the obvious combinations resulting from all vocal or all instrumental programs, mini-concerts involving combinations of Waytes and Court Players (Renaissance wind band), Court Singers and Criers and Friars (a double quartet with an additional voice for the soprano and bass parts), and the Queen's Consort and King's Table (the most excellent and versatile consorts of the Collegium) are also possible. The combinations provide variety in programming. Usually only a few selections actually are performed by the combined consorts.

The repertoire of the Criers and Friars includes vocal trios for women (SSA), vocal tries for men (TTB), and vocal trios for a double trio of STBar in which the middle part is sung by the lowest female voice and the highest male voice. The double trio combination is most appropriate for outdoor performance in which ambient noise levels can mask a trio. The King's Table usually consists of SSATB voices. During any semester in which a greater amount of the repertoire is to be drawn from the first half of the sixteen century, the group becomes a "tenor quintet" by exchanging the additional soprano voice for an additional tenor voice.

The Waytes may include ATTB, sackbutts or S cornetto in G and ATB sackbutts, depending on the availability of qualified personnel. The instrumentation of the Court Players is essentially a quartet of SATB recorders which can be expanded to a quintet with the addition of one of the upper three instruments. In addition, for greater projection in outdoor performance, either the bass or soprano can be doubled at the octave by an appropriate instrument such as bass dulcian or sopranino recorder. Presently, a member of the Court Players is learning pipe and tabor to give the consort an added dimension.

The Queen's Consort consists of pairs of treble, tenor, and bass viols, with personnel doubling on harpsichord, lute, harp or various plucked strings as their talents permit. Although specializing in violas da gamba, members of this consort also perform on krumhorns in outdoor performances and indoor processionals.

## Recruitment

For the uninitiated, the performance of Renaissance music using instruments and tone production techniques appropriate to the period creates somewhat of an exotic allure. To avoid recruiting students whose interests in early musical performance are superficial and relatively uninformed, auditions are generally made available only to upperclass students. In addition, the Collegium frequently performs at various student gatherings, particularly outdoors on the campus mall, in an effort to minimize the exotic atmosphere that is created by people in period costume performing unusual music with instruments often having little resemblance to contemporary band and orchestra instruments.

For most students, the encounter with the Collegium Musicum begins at the two-day orientation period during the summer preceding their first semester. Following a day of orientation and testing, the students and their parents have the opportunity to visit with representatives from fraternities, sororities, campus housing, and various special interest groups in a common area. In an adjoining area, light refreshments are served while the Collegium presents a continuous performance and lecture-demonstration. This program is performed in normal concert attire.

For many students' parents, their first return to the campus will be for Parent's Day in October. On this public occasion, the Collegium consorts may be seen strolling the campus green in their Renaissance costumes while performing music appropriate to the outdoor, festive environment.

In the spring of each year, the Collegium presents a more formal program, often including a number of polychoral selections. This performance takes place during the noon hour on a regular school day. Thus, without attending any formal indoor presentation, most students are kept well-informed of the Collegium's activities during their first year of attendance at UMR. For parents who may later wish to contribute to the UMR Development effort, the Collegium also represents an effort on the part of the University to provide a performance outlet for students with special interests.

Because the UMR Collegium director's responsibilities include conducting the University Choir and Orchestra, he is in a unique position to assess the talents and interests of a large segment of the student musicians. From this group each fall, approximately eight students are personally invited to become Collegium apprentices whose main public responsibility will be to wait tables at the Madrigal Dinners in December. During the ensuing months, the apprentices are grouped in pairs and given weekly instruction on recorders, singing, diction, solmization, early notation and Renaissance court dance and etiquette. Following the Madrigal Dinner performance, the student may elect to drop the Collegium program, continue with more in-depth instruction or audition for admittance to the Collegium.

## Training

During the opening weeks of the fall semester, approximately eight students are invited to become Collegium apprentices. The criteria for selection of these students includes the student's ability to read by sight, to give careful attention to intonation, to demonstrate sensitivity to beauty of tone, to recall melody and to draw a general musical awareness of phrasing. These are determined in their initial audition for admittance to choir or orchestra. In addition to musical consideration, the student's general cultural interests, academic standing, level of maturity, and other interests and talents are identified during personal interview and careful study of the student's academic transcript. Special note is taken of those with dance and stage experience, language skills, previous European tour performing experience, and a history of frequent attendance at professional concerts. While the quality of the student's educational background is of prime importance, their interest in music and European cultural history often can be the determining factor in their eventual level of success.

Once selected, the apprentices are grouped in pairs and scheduled for a once-weekly lesson with the Collegium director. Since the training usually includes singing vocal duets and court dancing, ideally each pair consists of a male and female student. In addition to the regularly scheduled lesson, the two apprentices arrange to rehearse together an hour each week outside the studio. The normal competition between the students usually assures an optimum amount of individual practice. Although students are assigned available Renaissance recorders from the university inventory, each is urged to purchase a pair of high-quality plastic recorders such as the "Stansby, Jr." soprano and "Bressan" alto sold by Zen-On. The initial frustration arising from the difference between double-hole Baroque instruments and single-hole Renaissance instruments is off-set by the convenience of always having an instrument available for practice. In addition, the purchase of instruments creates a greater sense of investment in his or her Collegium apprenticeship.

Once organized, the apprentices are given regular reading assignments in Hunt's The Recorder and Its Music and Wollitz's The Recorder Book, the first for purposes of acquainting them with the general background and history of the instrument and the second book to introduce them to the finer points of technique. Using *The Charlton Method for the Recorder*, a manual for the advanced recorder player, the apprentices are given sufficient instruction on both soprano and alto (or alto and tenor) recorders to familiarize them with the playable range of the Renaissance model, a range usually not exceeding an octave and a minor seventh.

Having gained some fluency in basic recorder technique, the apprentices are assigned duets from the "bincinia" repertoire of sixteenth century composers such as Gastoldi, di Lasso, Morley, and Lupacchino. As the students progress, an initial effort at reading from early notation is undertaken in the lesson. This is accomplished by familiarizing the student with a conventionally notated part and then asking each to attempt a reading of the same part as originally notated. Excellent editions of published music incorporating both systems of notation are available from several publishers including Sweet Pipes, Incorporated *Musical Selectra* series and Ogni Sorte Editions. Finally, an article from the *American Recorder* of May, 1978, by William E. Hettrick serves as a primer for reading of early notation and as a means of familiarizing the student to the melodic modes in use during the early Renaissance.

The last part of the first semester of study involves the student with texted pieces, particularly the late sixteenth century two- and three-part canzonets of Thomas Morley and the Italian and French duets published in the 1540's by Ihan Gero. The vocal range of this repertoire provides sufficient variety to generally accommodate the novice singer, and the technical demands fo the music are not excessive. The student's first encounter with the music is as an instrumentalist. Once familiarity with the notes has been accomplished, and perhaps a few easy divisions added to the otherwise spartan vocal lines, the student is given rudimentary instruction on vocal tone production, voice placement, vowel color and diction, and encouraged to attempt a vocal rendition. Only when it is obvious that the student's singing effort will never bear musical fruit without extensive private voice instruction is the student discouraged from proceeding to vocal sight reading, developing familiarity with conventional solfeggio, and the finer points of English and Italian diction. The students who do not exhibit vocal potential are encouraged to expand their instrumental talents to include either tenor or bass recorder. The instrument is then assigned to one of the duet or trio parts and played in the eight foot accoustical range.

The final stage of apprenticeship begins at the very end of the semester when the students are given instruction in Renaissance court dance. The experience culminates with their presentation of a dance at the Madrigal Dinners. The choreographer, who has some familiarity with the general etiquette of the Renaissance court environment, also instructs the apprentices in the appropriate conduct for serving the "high table" at the Dinners.

## Rehearsal Administration

A number of rehearsal and performance details must be considered when formulating the rehearsal schedule. Collegium rehearsals provide the non-music major participants the opportunity to both rehearse and "practice" their parts. While the students do practice outside the rehearsal, their time is limited. A twice-weekly rehearsal is preferred over one long rehearsal per week.

Performance practices of Medieval and Renaissance periods suggest the desirability of consort performance with one performer to a part. As Reese suggests, combining large groups of instruments in a chamber setting is not satisfactory due in part to an inability to produce a common pitch reference as well as the added question of aesthetic taste. Programs, therefore, include very few selections which involve the full company in simultaneous performance. Selections for the entire King's Musicke or Madrigal Singers also are limited in numbers. As a result, the greater proportion of rehearsal time must be devoted to individual consort rehearsal, a mode of performance the students find most gratifying.

Finally, the need to produce great amounts of continuous and varied styles of music at weekend, outdoor Renaissance festival performances and intimate Madrigal Dinner programs suggests the desirability for each of the six to nine ensembles to have its own repertoire. A "rule of thumb" followed by the UMR Collegium Musicum recommends each consort to be able to perform a twenty-minute program each semester.

The rehearsal schedule by which the performance goal is achieved consists of two major rehearsals each week (Tuesdays and Thursdays) during the regular class day. The instrumentalists arrive thirty minutes prior to the singers at 11:30 a.m. and rehearse as the King's

Musicke or in individual consorts. Announcements and rehearsal of any full company selections take place at 12:00 p.m. The instrumentalists are usually dismissed at 12:30 while the singers continue rehearsing until 1:20 as the Madrigal Singers or in individual consorts. In addition to these regularly scheduled rehearsals, each consort schedules a one-two hour weekly rehearsal at another time agreeable to its members and the Collegium director's schedule.

As might be suspected from the fanciful designations, each consort represents a particular strata of Renaissance culture. During each rehearsal, appropriate gestures, body movements, and facial expressions are added to the performer's repertoire. For the Waytes who trace their ancestry to the fifteenth and sixteenth century professional musicians, a coarse and rowdy group character is developed. The Court Ministrels, who tend to be even less disciplined, are forever trying to win the favor of the nobility despite their general lack of social graces. The Court Singers represent the young ladies and lords of the court and, while not as haughty as their older counterparts, nevertheless command the admiration and respect of the full company. The members of the Queen's Consort and King's Table depict the highest noble rank although their numbers may include a professional musician or two, a custom in keeping with the social practices of the time. These two groups strive to perfect a performance demeanor which does not recognize the presence of the audience while generating a maximum amount of cordial interface among the members. Contrarily, the Friars and Criers strive to create an amorous (if not lascivious) group character which is not always contained within the consort as flirtatious gestures to audience members are not infrequent.

When presenting short consort programs, one member of each group is selected as commentator. The comments are memorized and the monologue delivered in character with other members of the group occasionally heckling the commentator with their own improvisatory remarks. The goal of the commentator is to be both informative and entertaining while maintaining a distinct air of spontaneity.

With rare exception, neither the consorts nor the Collegium performs under a conductor. When an occasionally difficult final cadence requires it, the director may use a gamba bow or carefully gesticulated krumhorn movement to cue a late entrance or a complicated syncopated rhythm. Without a conductor, the students quickly sense the need for subtle concerted body movements and a total awareness of those movements on behalf of the performing director or the consort leader.

## Personnel Retention

The investment in time and other resources made in the training of each Collegium member is recognized as sufficiently important to implement a continuing program of personnel retention. At the heart of the program is a guild system which formally recognizes both the number of semesters of Collegium membership and the quality of the member's contribution. The program begins with the apprenticeship period described previously. The length of this pre-guild membership period may vary but usually does not exceed two consecutive semesters.

Upon completing a successful audition for membership in the Collegium, the student is assigned a Novice status for two semesters, either consecutive or non-consecutive. While the apprenticeship is a training period under the guidance of the director, the Novice undergoes continuous evaluation by his or her peers as well as the director. When difficulties arise during this period, it is the responsibility of the older members and the director to inform the Novice of his or her inappropriate conduct and help them achieve a more acceptable behavior.

Pending any gross behavioral problems, the Novice automatically advances to Artisan after the first year of membership in the Collegium. The Artisan is considered a tenured member of the Collegium and remains in that status until he or she drops the program or graduates.

The ultimate level of attainment in the Collegium is as a Master, which is achieved by those students who distinguish themselves as soloists, consort leaders and instructors, or as multi-talented entertainers who reach an outstanding level of solo performance in singing and instrumental music, or an adjunct area such as acting or dancing. Masters achieve their status through appointment by the director and the other Masters.

Visual recognition of guild status is accomplished through wearing of a special Collegium medallion, a privilege awarded to both Artisans and Masters. The Master medallion contains an additional inset jewel. Both Artisans and Masters are awarded the additional privilege of retaining their feasting cup upon graduation.

All Collegium members are encouraged to join the various amateur societies existing for the promulgation of a particular instrument or musical interest and the edification of its membership. These organizations include the American Recorder Society, the Lute Society of America, and the Viola da Gamba Society of America. (To the writer's knowledge, no organization comparable to the Madrigal Society of England exists in this country.) The societies provide continuity between the performer's academic environment and that which will be encountered after graduation from the university.

Despite the formal organization of the Collegium Musicum, its constituent consorts and its guild structure, its members are encouraged to approach their music-making in the same spirit as did their Renaissance and Baroque counterparts. The consorts' repertoires are taken from a number of collections which the students retain in their music binders. During any semester, each participant has available a quantity of performable music far in excess of that required for the semester's programs. From this body of music come many hours of fun and light-hearted music making after completion of the day's formal programs.

## References

Apel, Willi (1969). Collegium Musicum, Harvard Dictionary of Music, 2nd ed. Cambridge: Harvard University Press.

Campbell, Margaret (1975). Dometsch, the Man and His Work. Seattle, Washington: University of Washington Press.

Charlton, Andrew (1981). The Charlton Method for the Recorder. Columbia, Missouri: The University of Missouri Press.

Hettrick, William E. (1978). Back to Basics. The American Recorder, May, pp. 3-14.

Hettrick, William E. (Ed.). Musica Selectra, critical editions of early music for performance and study. Levittown, New York: Sweet Pipes, Inc.

Hunt, Edgar (1977). The Recorder and Its Music. London: Ernst Eulenburg Limited.

Kottick, Edward L. (1977). The Collegium: A Handbook. Stonington, Connecticut: October House, p. 7 also pp. 19-45.

Kramme, Joel (1977). Notes on Medieval Performing Practice, American Choral Review XIX (January), pp. 17-19 and Notes on Renaissance Performing Practice, American Choral Review XIX (July), pp. 7-12.

Reese, Gustave. Music in the Renaissance. New York: W. W. Norton & Company, Inc., pp. 545-549.

Taruskin, Richard (Ed.). Ogni Sorte Editions. Coconut Grove, Miami, Florida. These editions include an explanation and guide to reading the fifteenth and sixteenth century notation.

Wollitz, Kenneth (1982). The Recorder Book. New York: Alfred A. Knopf.

Young, Percy M. (1980). Collegium Musicum. The New Groves Dictionary of Music, 20 vols., ed.

Stanley Sadie. London: Macmillan Publishers, IV, pp. 559-61.

# AN INVESTIGATIVE STUDY OF YOUNG CHILDREN'S VOCAL PROBLEMS AND REMEDIAL NEEDS

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The problem of the child in the first two or three grades of school who is a conversational and/or an uncertain or inaccurate singer is of real concern to the music educator. It is in these early grades that children have the greatest interest in and ability to develop the aural discrimination, tonal memory and vocal production skills they need to become tuneful singers.

As a result of researching studies dealing with the young child's ability to learn to use his voice to sing and to match patterns and songs accurately, this study was undertaken with the help and cooperation of Nancy Hill, music teacher in the primary grades of the Warrensburg public schools, and two music education students from Central Missouri State University.

The purpose of this exploratory study was to try to identify the types of vocal problems and responses and the patterns and ranges sung most easily by the children in ten first grades who were determined by their music teacher to be conversational and/or inaccurate singers. An additional purpose was to explore a variety of materials and approaches and determine their remedial value with these children. The original study was expanded to include two more phases in the following school year to gather accurate information about tonal patterns and ranges and outcomes possible from individual remedial help. This study is of a delimited and empirical nature intentionally to provide a basis for controlled research in the future.

## Phase 1: Initial Testing and Remedial Sessions

### Method

The children who participated in the study were identified as needing help in finding and using their singing voice accurately by their regular music teacher and two university music eduction students assigned to the project. They listened to the children in group singing activities and assigned them generally into the conversational or inaccurate singer categories. The two university students were then assigned to either the morning or afternoon classes and they met with the children during their regular music class periods and recorded the information gathered from these sessions on check sheets and cassette tapes. The sessions were held one day a week for three successive weeks.

### Procedure

Eighty-two children (47 boys and 35 girls) in ten first grades participated in the Phase 1 study. A section of the regular music classroom was partitioned off with a piano and screen and a testing center developed with the piano, resonator bells, tape recorder, flannelboard and visual aids available for the use of the investigator and the children. The children were taken two or three at a time and grouped as much as possible according to the type of vocal problem they were having.

Each group worked with the investigator for approximately ten minutes and she was able to schedule three or four groups during each class period. The regular music teacher provided quiet game type activities for the rest of the class during these testing sessions.

The two university students doing the investigation were supplied with a list of approaches and materials to use with the conversational singers.

They attempted to determine the types of problems the children were having and experiment with the materials to find those with the most remedial value. Each investigator was free to choose her own materials from those provided.

Since these sessions were tape recorded, most of the evalution was done later as the investigators, the regular music teacher and the university coordinator listened to the tapes and filled in each child's observation sheet.

For the children having difficulty matching pitches and patterns accurately, the music teacher provided a list of familiar songs containing tonal patterns of two to five pitches (Jones, 1979) for the investigators to use. It was suggested that the patterns be sung in the keys of C, D, and E flat. Each investigator was free to choose the material that seemed most appropriate for that group of children. The approaches used included humming, singing vowels and words, indicating pitch and direction with visuals and body movements and playing step bells. The children's responses to the patterns were tape recorded and transferred later to individual check sheets indicating the types of responses made (Petzold, 1960; Boardman, 1963) and the pitches used.

During the final session some of the children were given instructions on how to play the kazoo. They were asked to hum and then play simple tonal patterns and short songs such as "Hot Cross Buns." The instrument was used as motivation and also as another diagnostic tool to determine singing skill (Runfola, 1981). The children enjoyed the instrument, but in some cases were not able to make a sound in the short time available or found its sound amusing and didn't really try to play it.

## Results

The study found that conversational singers often had a heavy, husky quality to their voices and spoke with little vocal inflection in a low register. Some were self conscious about their voices and hesitant to try to use other vocal registers even for speaking or imitating things. Many did not realize and/or were unable to produce sounds, spoken or sung, at different pitch levels. The transfer of a high speaking to a high singing voice was also a problem, with the sound being breathy and showing tension. Other investigative and vocal problems encountered are given in Table 1 along with the most successful remedial materials.

Table 1

Vocal Testing of Conversational Singers - Spring, 1981

Most Successful Approaches

1. Developing flexibility

   * Conversation using puppets
     - Grouch (low), Duck (high), Mouse (high), Dog (both)
   * Imitations of animal sounds
     - Rooster and baby duck (easiest for high) Duck, pig, lamb, cow
   * Imitations of environmental sounds
     - Train whistle, telephone, jingling money

2. Speaking vs Singing

   * Echoing (say then sing)
     - Names, conversations, phrases from Goldilocks and the Three Bears, nursery rhymes

3. Approaches to singing

   * Squeak (finding head tones)
     - Phrases from Goldilocks and the Three Bears
   * Humming
     - Echo patterns by humming, then play on kazoo

## Problems Observed

1. Vocal problems

   * Confuse speaking and singing in the low register
   * Don't hear direction correctly
   * Confuse loud and high
   * Switch back and forth between speaking and singing. Poor vocal control
   * Little vocal flexibility - no head tones
   * Speaking voice low pitched, heavy quality

### 2. Investigative problems

* Didn't really work with contrasting speaking and singing with phrases and patterns
* Didn't do much with "hum" or "shout" approach
* Didn't have specific requirements for testing
* Difficult to make notations on check sheets while working with children. Tapes not always audible.
* Working within a regular classroom situation with several children at once.

The inaccurate singers had some of the same problems as the conversational singers. As can be seen in Table 2, they often sang the pattern in their own range or were able to match only part of it. The later seemed to be more of a lack of vocal control than an aural problem. They too were confused between speaking and singing especially when the patterns fell in the normal speaking range. One child used a very high singing voice for all the patterns. She showed contour but did not seem to realize that she was not matching pitches or thought that to sing she must use a very high voice. She showed little improvement when tested the following spring. Several children were able to correct mistakes in contour, including repeated tones, if these were pointed out to them, indicating understanding of pitch but lack of tonal memory development. The melody bells proved to be a good motivation as the children were eager to play and sing along with them. The patterns and ranges sung most accurately can be seen in Table 2 and also the number and other types of responses the children made. A summary of investiga-

Table 2

## VOCAL TESTING - Spring, 1981

"Most Common Patterns Used & Type of Responses Made"

| Patterns | $5\ _3$ and $5^6 5\ _3$ | | | $^3 2_1$ | | $1^2{}^3\ \underline{5}$ | | $\underline{5}\ 8(1)$ |
|---|---|---|---|---|---|---|---|---|
| Range | $A^1$ $D^1$ | $E^1$ Middle C | $D^1$ low A | $F^1$ low B | $D^1$ low A | $A^1$ middle C | $E^1$ low G | low A $F^1$ |
| Correct | 35 | 20 | 7 | 40 (37 were $E^1$ Middle C) | 12 | 1 | 11 | 2 |
| Other Types of Responses: | | | | | | | | |
| Partly Correct | 31 | | | 12 | | 2 | | 8 |
| Transposed | 47 | | | 13 | | 1 | | 3 |
| General Contour and Correct Number of Tones | 42 | | | 15 | | 7 | | 5 |
| Incorrect Contour but Correct Number of Tones | 18 | | | 6 | | 2 | | |
| Totally Incorrect | 4 | | | 2 | | | | |

No. 82
Boys 47
Girls 35
$A^1$=A 440

Problems Observed:

1. Didn't hear melodic direction; step/skip i tervals
2. Poor control of singing voice
3. Added tones to patterns
4. Lack of coordination between ear, mind, & vocal cords (Maturation)
5. Not aware they were not matching pitches
6. Patterns pitched too low by investigators

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tive and vocal problems is included. Many of the children participated in the activities for both categories of singers.

A summary of the number and types of responses the children made playing selected patterns on the kazoo is given in Table 3.

Table 3

VOCAL TESTING - Spring, 1981

*Performance on the Kazoo

| Pattern | 5 3 | 5 3 5 | 3 2 1 | 5 3 1 |
|---|---|---|---|---|
| Range | $A^1$ $g^1$ |  | $B^1$ middle C | $G^1$ $g^1$ middle C |
| Correct | 12 | 6 | 10 | 1 |
| Partly Correct | 2 | 2 | 2 |  |
| Transposed | 8 | 6 | 7 |  |
| General Contour and Correct Number of Tones | 2 |  | 2 | 1 |
| Total | 24 | 14 | 21 | 2 |

No...... 36 (6 children had difficulty playing the instrument)
*Only used in one test session. Not all the students were involved or asked to play each pattern.
$A^1$=A 440

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## Conclusions

While the information gathered in this first study provided insight into the children's vocal problems and patterns and ranges they sang most easily, it was decided to do a follow-up study to more accurately determine individual children's singing ability on other specific patterns and ranges.

## Phase 2: Follow-up Testing

### Procedure

In the fall of 1981, fifty-six of the original group of children were still available for testing on an individual basis. This was done by the music teacher and her student teacher. The patterns, ranges and types of responses made were recorded for each child on the same type of check sheet that was used in Phase 1. As can be seen from the figures given in Table 4, not every child was tested on each pattern in each pitch range.

### Results

The pattern found to be the easiest for the children in this phase of the study was 5-8 which Petzold (1960) and Boardman (1963) also found to be one of the most accurately sung. Better than 70% of them matched the pitches in the lower ranges, but only 44% in the $D^1$ and $G^1$ range. When including those who made partially correct responses also, the percentage rose to 88% for the lower ranges and 81% for the high range.

On the tonic chord pattern, 51% of those tested sang the pattern correctly in both

## VOCAL TESTING - Fall, 1981

### "Additional Patterns and Ranges"

| Patterns | $\underline{5}$ $^{8(1)}$ | | | | 1 $^{3}$ $^{5}$ | | 1 - 2 - 3 - 4 - 5 | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Range | low A $D^1$ | low $B^b$ $E^{b1}$ | middle C $F^1$ | $D^1$ $C^1$ | $C^1$-$E^1$-$G^1$ | $E^{b1}$-$G^1$-$B^{b1}$ | $C^1$ $G^1$ $C^1$ | | $D^1$ $A^1$ $D^1$ | |
| Correct | 40 | 39 | 32 | 24 | 29 | 26 | 16 | 17 | 9 | 15 |
| Other Types of Responses: | | | | | | | | | | |
| Partly Correct | 8 | 8 | 14 | 20 | 13 | 7 | 3 | 12 | 2 | 8 |
| Transposed | | | | 1 | | 1 | | | 1 | 1 |
| General Contour and Correct Number of Tones | 3 | 4 | 3 | 2 | 9 | 12 | 5 | 5 | 4 | 9 |
| Contour Correct but Incorrect Number of Tones | | | | 1 | | | | | 1 | |
| Incorrect Contour but Correct Number of Tones | 5 | 4 | 3 | 6 | 5 | 5 | 2 | 9 | 3 | 12 |
| Total Responses Made | 56 | 55 | 52 | 54 | 56 | 51 | 26 | 43 | 20 | 45 |

| | |
|---|---|
| No. | 56 |
| Boys | 31 |
| Girls | 25 |
| $A^1$=A | 440 |

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ranges, but when including those who sang part of it correctly also, 75% of them were successful in the lower range. Only 64% were able to sing all or part of the pattern in the higher range. A number of children also showed an understanding of general contour even if they were not able to produce the correct pitches.

The stepwise pattern was used in both ascending and descending form. Fewer children were tested on each pattern in each range because of lack of time. The children tested were most successful in singing the ascending pattern in the middle C to $G^1$ range with 61% singing accurately and 73% making accurate or partially accurate responses. In the descending form, they were again more successful in the middle C to $G^1$ range with 40% singing it accurately and 67% singing all or part of it accurately. This compares to $33^1/3$% accurate responses and 51% accurate and partially accurate responses in the $D^1$ and $A^1$ range. A larger number of children appeared to have trouble hearing the contour of this descending scale pattern than they had with the other patterns. This may have been because the other patterns had moved upward or their ear and mind were not aware of the high starting pitch. This is contrary to the findings of Boardman (1963) where the descending scale pattern 4-3-2-1 was one of the most frequently matched by kindergarten, first, and second grade children.

## Phase 3: Individual Remedial Sessions

### Procedure

During their second year in school, most of the children in the previous test groups learned to sing reasonably well. Of those still needing help, eight were chosen by their music teacher for intensive, individual help. The music teacher and the university coordinator each took four of the children and worked with them individually for fifteen minutes each day for two weeks in succession. The sessions were held after school hours in the school building. Each session was taped for analyzation, study and recording of the responses at a later time. The two teachers conferred as to possible remedial approaches to use before the second session and for future sessions. A variety of approaches were again explored and visuals, hand and body levels, and step bells were used by the teachers and children.

## Individual Results

Bernard, who had a naturally low, husky speaking voice, was able to produce three different pitch levels when imitating the three bears and singing with the resonator bells $(C^1G^1C^{11})$. He was able to sing stepping and jumping patterns in a $C^1$ to $C^{11}$ range while singing all or part of the three familiar songs. He was able to play the kazoo and found his head tones by humming and squeaking in a baby bear voice. Maturation and additional singing opportunities during the year seemed to be a factor in his development from the testing at the end of grade one where he had no success at all in producing head tones.

Jason had a good understanding of pitch and direction, but needed to develop additional vocal control to sing accurately in a wider range with the class. He had trouble singing the C scale and humming individual tones seemed to help him match the pitches. The longer, more complicated patterns (words and notes) in "The Farmer in the Dell" and "Are You Sleeping" were difficult for him.

Tina was rather shy but seemed to understand what was wrong when the pitches did not match. She tried humming and squinting to help produce high head tones. She lacked vocal control when singing a C scale and arpeggio, matching only part of the tones correctly. On the arpeggio, she tried humming each pitch individually before singing it and sang both higher and lower than the pitch before matching it accurately.

Kim sang everything in a very high voice which she apparently associated with the correct way to sing. She had only limited success in matching even the teacher's speaking voice, but imitated the voices of the three bears fairly well. Her natural speaking voice is in a normal range but she needs a great deal of help. She was absent for the second session. She showed little improvement from the first time she was tested the year before.

Jason B. was not able to match the tonal pattern "Hot Cross Buns" in his first session. He showed some pitch change but didn't seem to understand direction or have much vocal control while trying to sing the C scale with the bells. Pitch direction terms (basement, roof top) and hand levels were used to help him. He finally matched a few pitches, even singing some higher. He would also transpose patterns and switched frequently from his singing to his speaking voice. In the second session, he was able to sing 3-2-1 in the range of $F^1$ down to middle C and could also match high C. He appeared to understand the "open" sound of the head tone and by using a projected, shouting type of approach was able to sing a fourth line D. He lacked control as the voice moved from the high into the middle pitch range while singing a scale. He showed some improvement after a year in class and the remedial sessions but still has many problems. The previous year he had not been able to match any patterns.

Jeremy seemed to understand the concept of direction while imitating a wind sound, but could not match the scale tones. Having him bend his head then look at the clouds was tried unsuccessfully as was putting the teacher's finger on his throat-face-head to indicate direction. He was finally successful in singing a head tone on "oo" by imitating the squeak of the mouse and was able to match a pitch with the teacher. In the second session, he was able to match the "yoo-hoo" pattern in a range from $A^1$ down to $D^1$ and a third space C on a step wise pattern. Using a baby bear voice and moving his hand up and down seemed to help him understand pitch levels. He showed some improvement on matching pitches and using a head tone from his initial testing in Phase 1.

Laura matched familiar patterns in the range of middle C up to $A^1$ and in the second session extended this up to third space C. She seemed to recognize when she was not matching pitches and hand levels and words (top of your head) were used to help her understand her error. She was not able to sing the C scale up or own successfully, matching only random pitches. When starting "Are You Sleeping" herself, she transposed the song when reaching the higher pitches. She also had trouble with repeated pitches in "Hot Cross Buns." She needs opportunities to develop vocal control in moving from the high to the middle range.

Antoine was somewhat of a discipline problem. He had a flexible voice and could sing the C scale and several short songs accurately. He seemed to know when he was matching the pitch, but showed some lack of vocal control. The second session was somewhat less successful, perhaps due to his lack of interest. He was unable or unwilling to sing the C scale downward with the melody bells, but did successfully echo the teacher on "yoo hoo" on the pitch pattern $E^{11}$ down to $C\#^{11}$ using a calling or shouting approach. He did not seem to have improved in his vocal ability much during the year.

## Conclusions

1. Some children have great difficulty in distinguishing speaking from singing and in learning to use the vocal apparatus to make singing sounds. They need regular, individual help in hearing and feeling the difference as they develop flexibility and the vocal control needed to produce particular pitches and patterns.

2. Musical terminology of pitch and direction needs to be clarified and made more concrete through visuals and body movement.

3. The children need experiences in hearing and feeling when pitches match and when tones are produced in the head. They need to be involved cognitively in analyzing their responses and what they need to do to correct them.

4. Short familiar tonal patterns in a variety of keys are the best remedial material for tone matching.

5. The range of $C^1$ to $A^1$ is the easiest for young children to sing.

6. The ability to match tonal patterns does not always carry over to singing the songs from which they were taken. A tonal memory needs to be developed for longer phrases.

7. A variety of approaches needs to be tried in helping children learn to sing. Humming and squeaking are effective in developing head tones and calling loudly with an open throat and good support can help the child with a heavy quality produce a singing sound.

8. Children having vocal problems need positive reinforcement from the teacher for their willingness to try to develop a singing voice and for any success they have in matching pitches and patterns.

## Discussion

This study, done over a year's span, pointed out that some of those having real problems finding and using a singing voice do not learn to do so in regular music classroom activities and need much individual help over a long period of time. The two final remedial sessions were not sufficient to prepare these children to sing second grade materials very accurately.

Since learning to use and control the vocal apparatus for singing is such a problem, it would seem that more time should be spent in the beginning grades doing vocal activities that go through all the registers and use vowel sounds to sustain and change pitches. Good posture, breathing habits, and light tone quality should be stressed. Singing is an important means of expression and deserves a great deal of attention in the early school years where children have the greatest interest and ability.

The problem of the non-singer needs to be addressed before the end of grade one. Much of the pre-school and kindergarten music program should focus on helping children learn to sing. Calling on their imagination to "be" something else can open the way for them to make sounds in all vocal ranges. By sustaining vowels in words and using normal vocal inflections the singing process can begin very naturally.

## References

Boardman, Eunice (1963). An investigation of the effect of pre-school training. Doctoral Dissertation, The University of Illinois.

Jones, Merilyn (1979). Vertical keyboard instruction with uncertain singers. *Journal of Research in Music Education*, Fall.

Petzold, Robert (1960). *Development of auditory perception of musical sounds by children in the first six grades*. Madison, Wisconsin: University of Wisconsin.

Runfola, Maria (1981). An investigation of a technique for identifying early childhood uncertain singers. State University of New York at Buffalo. (Paper presented at the MENC Convention, Minneapolis, Minnesota.)

# MUSIC AND MUSIC EDUCATION IN THE KORESHAN UNITY SETTLEMENT
## ESTERO, FLORIDA

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Take a moment to examine the bibliography. As you can conjecture, the sources listed here have little or nothing to do with music, but deal rather with the Hollow Earth Doctrine (Hohlweltlehre). This is a partial bibliography. There is nothing written about music and the Koreshan commune. There are only old (and some not so old) programs and newspaper clippings remaining.

Considerable research had been published on the Hollow Earth Theory in general and on Dr. Cyrus Teed's work and his commune in particular, but nothing so far as I can tell is written on the music which has played such a significant role in the Koreshan community. I therefore felt myself to be in close proximity to a particularly interesting research area, after retiring from Washington University and finding myself living a scant 15 miles from the Koreshan State Preserve and the Koreshan Unity Settlement.

I do not intend to deal with the credibility of the Hollow Earth Theory nor with the connection between Cyrus Teed and the psuedo-science of the "lunatic fringe" of Nazi "science," although one must point out that the Hohlweltlehre seemed to attract pre Nazi and Nazi followers and that Dr. Teed, although having no direct connection with individuals in the German (not to mention followers of the

Argentinian Duran Navarro et al.) did, in his publications, appear to exert some influence on those who had already embraced a part of all of the notion of our living in a hollow earth.

The initial research opportunity I referred to was that of cataloging or at least listing hundreds of pieces of music used between the 19th century up to the early 1930s and to engage in lengthy recorded conversations with Helwig Michel, then aged 89, the last president of the Koreshan movement.

Since her death last year I continue to regret the loss of a cosmopolitan and cultured friend. I am grateful for the hours of aural history I obtained on cassettes.

But before we can deal with the musical aspects of the Koreshan commune, we must provide a brief sketch of Teed and the Koreshan society.

Driving south from Ft. Myers on Highway 41 (the Tamiami Trail), it is very easy to drive without noticing the city of Estero which consists of a fruit stand, a small grocery, a trailer park, a sleepy little river (the Estero) and the Koreshan State Preserve, or park. I doubt that one out of a thousand is even aware of the presence of the magnificent wildlike preserve which is more exotic botanically than perhaps any other place in south Florida, due to Cyrus Teed's zeal for the importation and exportation of plant life from all over the tropical and subtropical world. Nor is the traveler aware of the existence of many of the original buildings, all wooden, and for the most part in remarkably good condition (several of them are in the process of restoration). And just across

41 on the new shortcut to I-75 is a most remarkable new solar-shaped library building which is one of the most important parts of the Koreshan attempts at a renaissance.

Cyrus Teed was born in 1839 in upstate New York, brought up in a strict Baptist family, served as a private in the Union army as a paramedic. After his discharge, he pursued medical or so called medical studies in the New York Eclectic Medical College, emerged a full fledged "doctor" of eclectic medicine (this discipline relied mostly on herbal remedies) and set up practice in Utica, New York. It is conceivable that the Copernican theory with its infinite spaces and various suns was incomprehensible if not terrifying to Teed. To quote Gardner, p. 23, ". . . He longed to restore the cosmos to the small, tidy, womb-like character he found implied by Holy Scripture. That the earth was round he could not doubt ...but (even) if this were so, where did space end?" Then a vision supposedly came to Teed at midnight in 1869 which he described in a pamphlet entitled The Illumination of Koresh: Marvelous Experiences of the Great Alchemist at Utica, N.Y. (This title is typical of Dr. Teed's modesty.) The name Koresh is a Biblical name for Cyrus. The burden of the pamphlet was that we dwell on the inside of the earth. Astronomy was half right except that it had everything backwards. It is interesting to note that it was a beautiful woman who spoke to him in his vision. Women, beautiful or not so beautiful, were to play a very important role in the charismatic Teed's entire life.

In 1870, using the pseudonym Koresh, The Cellular Cosmogency was published which set forth all that had been revealed to him, although in the version I have it does not mention the fact that the divine lady also spoke to him of his previous reincarnations and the role of messiah he was to play in this one. It is not the purpose of this paper to dwell upon the intricacies of the Cellular Cosmogeny. But we must take note of the fact that, according to Gardner, Teed became known as the "crazy doctor" and lost most of his medical practice. Somehow he scraped together enough money to move to Chicago, establishing there, in 1866, the College of Life. In the meantime his wife had left him and he was free to (Chicago Herald, 1884) "...exercise ...a strange mesmerizing influence over his converts, particularly the other sex." In fact, Gardner claims that three out of four of his followers were women. (Information available to me at the Koreshan Unity Center does not bear this out, at least so far as it relates to those most devoted followers who left Chicago with him about 1890 to set up the "New Jerusalem" a city which was to be the home for 800 million people according to Teed's dream.) About 200 of the devoted set to work on the seemingly impossible task of carving out of the palmetto, pine and swamp-cabbage jungle a tract upon which could be built a city which was one day to accommodate 800 million. This never quite came about, but what was accomplished is nevertheless very remarkable.

The first thing to do, obviously, was to build living and cooking quarters of the commune (for that is what it was, like other communistic endeavors of this period and earlier) and to plant gardens, etc. Dr. Teed was no fool. His experiments with botany are perhaps more to be admired than any other single undertaking. It is worth noting that the state of Florida which bought a portion of the Koreshan holdings would now like to remove the non-indigenous flora. I am no botanist but I feel that this would be most unfortunate.

And now we can begin to talk about music and musical education. I do not pretend to have the final word to give you on music in Koreshan life, but only a start on this neglected aspect of Floridiana.

Although members of the top hierarchy of the Teed commune were supposed to practice sexual abstinence, other members were not so advised and children began to arrive, in addition to those brought by the settlers from Chicago. The nature of Teed's followers (many intellectuals, middle and even upper middle class people) demanded not only education for their children but for themselves as well. One almost sees a prophecy of Ivan Illich (The Deschooling of Society) although in reverse, plus a mixture of John Holt and Silberman of 15 years ago in the kind of education which grew initially. It was out of necessity, of course, that there should be open schools in the most literal sense of the word. Spokesmen and women who remain faithful or even interested in Koresh make the point that Unity was always the keyword in the Koreshan philosophy, and that education, art, manual labor, etc. could and should not be separated (shades of John Dewey). The earliest education took place outdoors for the most part through informal conversation and group singing until it became more formalized with the construction of a building which housed students from the age of kindergarten through university.

It is of particular significance, I think, that with the enormous cost and trouble that it took to ship any quantity of items from Chicago to the mouth of the Estero and thence by barge up the river to the new Jerusalem, among the first items to come were books of a reasonable scholarly nature, printed music, two grand pianos, and an assortment of musical instruments, some of which are still on display in the park. These instruments range from violins to side winder trumpets, a tuba, percussion instruments, auto harps, plus many more. I might also add that although the band and orchestral instruments are in a very bad state of repair, at least one of the grand pianos is kept in tune and I in fact played on it when giving a lecture-recital two yeas ago concerning the pedagogical music which my wife and I had listed. It is certainly significant that the Koreshan group developed not only the first printing press and first lumber mill in southwest Florida, but also the first "orchestra" and the first band.

The music instruction became much more formalized as the community progressed. A number of the followers were themselves professional or amateur musicians and other music teachers were employed by the turn of the century.

I must rely now totally on oral history, chiefly that of Hedwig Michel, since, aside from the extent music and the instruments and some printed programs, I can find no written evidence for what I am about to relate concerning the role of Music.

Perhaps most significant to me is the claim that all children were required to study a musical instrument and to sing. In addition, solfege was a part of the curriculum from the earliest to the latest years of schooling using the common English movable do. Concerts were presented on a regular basis in Art Hall (a small auditorium still extant). The concerts were presented by both the ensembles as well as soloists and chamber consorts.

The printed programs I have seen and the music I have examined show nothing extraordinary for the times (late 18th century to the early nineteenth thirties). Clementi, pedagogical editions of Bach Little Preludes (edited for example by Preston Ware Oram), Etude magazines starting about 1913, McDowell, a great deal of kitsch vocal literature--and then more so-called serious literature--Chopin, Beethoven, Bach, et al.; in fact just about what one would expect to find in a teacher's library for voice and piano, plus considerable band literature arrangements of overtures, marches and the like. So far I have not discovered any traces of elementary (early childhood) series. They may exist.

A few tentative conclusions can be drawn concerning the preference of the pedagogues during the period from the late 19th century to the early thirties: (1) the materials reflected standard teaching practices known to me for that period; (2) There was no attempt to use anything which could even remotely be regarded as avant gard; (3) There was no particular school of religious music cf. Moravian; (4) The emphasis was on piano and vocal works although I must point out again that this conclusion is based on only, for the most part, uncatalogued music we examined; (5) There was almost no "popular" music in the collection with the exception of two or three blackface minstrel type works---published in France, by the way; I shall not attempt to read any racism into this.

Regarding the first observation, i.e. the reflection of pedagogical practices of the times, I should like to mention two aspects of particular importance. During the 1920's school bands became increasingly popular due mainly to the growth of bands in the military during the first world war and the subsequent emergence of professional touring bands under the directorship of such notables as Sousa, Bachman and Goldman. (The first professional concert I ever heard was in about 1924 in Regina, Saskatchewan, Canada---Sousa's band, no less, at the provincial fair. My parents, of modest means took me and my sister by train fifty some miles especially to hear this great musical treat.) Although the school band movement in the United States had enjoyed some popularity prior to 1917, the school orchestra movement was still prominent, but most particularly the piano was the instrument which reigned supreme in every household with any pretense to "culture" and the piano teacher was the most important figure in American musical education, although not usually in the public schools. With the enormous growth of band music, both in the schools and on the municipal level, piano teachers, publishers and piano manufacturers all felt somewhat threatened. How natural then to attempt to meet the antagonist on his own terms. Therefore, hundreds of minor composers set to work writing imitation wind band music for the piano: marches, polkas for the young pianist. The market was very large. Private piano teachers were eager for such materials to attract and hold students who provided their livelihood.

Such "Bibles" as Etude Magazine as well as major American publishers rushed into a highly lucrative movement. An additional spur was provided by an enormous amount of activity on the part of wind instrument manufacturing companies and resulting "Music Man" attempts to take over music education. Some states, especially in the middle west, allowed a municipality to levy a "band tax" to support a municipal band and instruction for all youngsters eager to play the saxophone or trombone, or whatever. Taking all of this into account, it is not surprising to find a rather large corpus of piano music in the Koreshan library, at the intermediate to elementary level of difficulty, with such titles as "Our School Band." In fact, entire volumes of music of this ilk are to be found in the corps of piano music we examined. This music is harmless, sounds very dated to our ears and is of no particular value musically or otherwise except to the student of Music Education History and to the Koreshan music educators (pianists). These observations are not meant to denigrate the kind of pedagogy of music which went on in Estero, but only to provide some evidence that this pedagogy reflected general music pedagogy of the times. Therefore, while most may regard the Koreshan movement as being somewhat esoteric, the only extraordinary thing about their music and music education was the importance attached to it, not its content. The presence of the musical prototype of the literary "noble savage" is also much in evidence, ranging from the "best" McDowall and Dvorak, to the "worst" (whose names are mercifully long since forgotten). The persence of the so called universal pentatonic scale, open fifth tomtoms ("Indian") and "Going Home" type melodies (Negro, as they were then called) were in evidence. Vocal music, both with piano and string accompaniments, also contained a significant amount of this kitsch.

Before we attempt to supply some explanation regarding the importance of music to the inhabitants of the New Jerusalem, let me once more comment on the genre of music used, at least so far as I can tell. There is, besides the formerly unlisted publications we examined, a fairly large corpus of standard Bach, Mozart, Mendelssohn, Haydn, et al. in reasonably good condition. There are, of course, hundreds of one page fragments of, say, a tuba part to this and a clarinet part to that. These fragments lead to suspect that the band and orchestra repertoire was on a somewhat less significant level, musically speaking, than the piano music. But, there was no Koreshan music.

The most difficult task, then, is to attempt to account for what all evidence points to the predeliction for musical education and concerts by the Koreshan commune using music of the common practice period and pedagogical music typical of the period--1890s to 1930s, not to mention the importance given to music in the current renaissance.

1. We can safely dismiss, I think, any so called "work-song" practices. It may well be that some people whistled (proably not Dixie) while they did their unaccustomed manual labor, but these middle class and upper middle class people were not likely to have engaged in rhythmical work songs, or field hollers or anything like it. And there is no evidence that they did.

2. According to Ms. Michel, Unity (this word that appears so frequently in Koreshan history) would naturally be expressed in a primal, tribal way and these people, the earliest pioneers to the later members, such as Miss Michel herself, would most certainly turn to music as the most natural means of expressing their feelings of unity and tribal belongingness.

But of course the next question would be: should children take piano lessons at best or sing kitsch at worst? This does not seem to be a tribal expression.

3. Quite possibly the answer lies in a more obvious area of speculation, i.e. the social class from which these pioneers and their followers came, and the general American ambience of the late 19th century up through the 1920s of the middle class and upper class self image, especially among women. Having a piano in the home, and requiring that children, especially girls, take piano lessons, is certainly as common for that period as takin guitar lessons complete with electronic gear is for the present day. Why did my mother insist on moving a heavy Victrola console from Iowa to Saskatchewan to Winnipeg and back to Iowa in the Hilton peregrinations? A genuine love for music, partly but where did this feeling fo a need for music originate? From the middle class, reasonably well educated family milieu in which she grew up (my grandfather actually went to college--something that only a reasonably well-off farmer would be likely to do in the middle west of the United States of the second half of the 19th century).

So we must, I think, assign most of the credit for use of music in the Koreshan communs to social class origins.

4. Koresh himself is said to have believed in the importance of music as human experience and expression.

5. The later arrival on the scene of such people as Miss Michel (1945) with a background of professional management (The Frankfurt Symphony) while not typical, is not altogether untypical of the level of social background represented by members of the commune past and present. Her father had a doctorate in linguistics from the University of Strassbourg with a special interest in the verse and music of the Troubadours and was a poet and music lover as well. Miss Michel herself collaborated with Paul Hindemith on a little opera for children called Tuttifantchen (All Is Makebelieve) which was published by Schott in 1922.

Perhaps, then, the best explanation for the Koreshan preoccupation with music in their educational world as well as their social life can best be ascribed to the social milieu from which they came, and I conjecture, in part from the important role played by women.

As a codetta to this paper, I think it is worth mentioning that during my last oral history session with Hedwig Michel which lasted about 5 hours, in the new Solar Library, no fewer than three telephone calls came from students and a journalist requesting personal interviews to further their university research or to provide a feature story for a Florida periodical.

There is an unfortunate postscript to this story. Ms. Michel died at the age of ninety. She was widely known throughout the southwestern part of Florida and to countless historians concerned with the commune movement in the 19th century of the United States.

The library remains; the property on the beach is still in the hands of a board of directors; the magnificent park is going to become a state nature preserve under the terms of her will.

But to my knowledge, Ms. Michel was the last of the true Koreshans, the last who lived the Koreshan life, and the last, so far as I can tell, who subscribed to the hollow earth theory. Saddest of all is that she was the last who had the overwhelming interest in music, the arts, linguistics and education in general. The executive board does maintain a great interest in ecology. There is a rather large sum of money at stake. Who knows what effect that may have on decisions made regarding the future of what remains of the New Jerusalem?

## References

Damkohler, Capt. E.E. (1967). Estero, Florida: Memoirs of the first settler. Ft. Myers Beach, Florida: Island Press.

Gardner, Martin (1957, Reprinted 1959). Fads and fallacies in the name of science. New York: Dover Publications.

Ley, Willy (1956). The hollow Earth. Galaxy Magazine, March.

Miller, William (1941). The theory of concentric spheres. *Isis*, *33*, 507.

Peck, John W. (1909). Symmes' theory. *Ohio Archeological Historical Publications*, *18*.

Teed, Cyrus (1975). *The cellular cosmogony of the Earth a concave sphere*. Philadelphia: Porcupine Press (originally published 1905).

Also see part II of this volume by E. G. Morrow, *The New Geodesy*.

Teed, Cyrus (1916). *The Great Red Dragon or the Flaming Devil of the Orient*. (Published under the pseudonym of Lord Chester.) Second edition. Estero, Florida: The Guiding Star Publishing House.

Periodical (1906). *The American Eagle*. Estero, Florida: Koreshan Unity Settlement Historic District.

# Koreshan Unity president dies

U.S. 41 stretch dedicated . . 1B

By DAVID BIRD
*News-Press Staff Writer*

ESTERO — On the day that state officials praised her for efforts toward widening U.S. 41 in Estero, Hedwig Michel, president of the turn-of-the-century religious group Koreshan Unity, died.

Michel, 90, was unable to attend the ribbon-cutting ceremonies Thursday for the widened 5-mile stretch of highway because of her health, said Jo Bigelow, vice president and assistant treasurer of the religious group.

Michel also was unable to visit with Gov. Bob Graham and Secretary of State George Firestone, who were on hand for the ceremonies, Bigelow said. She died late Thursday afternoon.

State Rep. Frank Mann, D-Fort Myers, who at the ceremony said he was sorry Michel wasn't present, said he was deeply saddened in learning of her death.

"The last thing I did this afternoon as I left was tell my aide to get a letter off to her tomorrow morning," Mann said. "She was a magnificent lady and was truly the one who helped us (on the road project). This is a very black day."

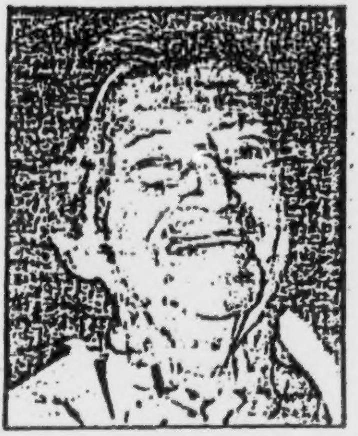
The widening of the stretch of U.S. 41 from Estero to Bonita Springs had been delayed for several years because the road's path would cut through the Koreshan Unity property, which is listed on the National Register of Historic Sites.

Michel, seeing the need for road improvements in the area, pushed for the project to be completed, Mann said.

"Singlehandedly, she could have stopped it if she wanted to," Mann said. "She was so open-minded that she cooperated and recognized the need."

Koreshan Unity Inc. was founded in the late 1800s by Dr. Cyrus Teed, also known as "Koresh."

The group believes in "cellular cosmogony," which holds that the earth is a hollow globe 25,000 miles in circumference with the sun, moon and other heavenly bodies contained within the shell. The group also advocates celibacy.



HEDWIG MICHEL
. . . dies at age 90

The group moved to Estero in 1893.

Michel was born of a lofty German family, which included a brother who was city manager of Frankfurt. She worked in German opera and theater.

She left Germany for New York and moved to Estero in 1939 to join the Koreshan movement. In 1952, she began efforts to preserve the settlement by deeding 305 acres of the settlement to the state. Bigelow said Michel was the last member of the group living at the site.

She had been editor of "The American Eagle," a monthly newspaper dedicated to "the wise use of natural resources," and wrote a column called "Florida Fruits and Flowers" for the Sunday edition of the News-Press for 15 years.

Michel also set up the non-profit Pioneer Education Foundation at the corner of Corkscrew Road and U.S. 41 in Estero.

Bigelow said Michel was told the road dedication ceremony took place before she died Thursday. "She was very pleased," Bigelow said.

Michel held life memberships in the Izaak Walton League of America, the Florida Audubon Society and the Southwest Florida Audubon Society.

Funeral arrangements were incomplete Thursday evening, Bigelow said.

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# DISCRIMINATION AND CONSISTENCY OF JUDGMENT OF MUSICAL BALANCE OF WIND QUARTETS: AN EXPLORATORY STUDY

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Conducting and rehearsal techniques texts stress the importance of the conductor's ability to attend to problems of intonation, pitch and rhythm errors, and balance in the musical ensemble. While research has explored many other responsibilities of the conductor it has failed to study perception of musical balance. This research attempted to provide initial information for future investigations in this area.

This researcher identified two abilities associated with perception of musical balance: 1) discrimination of changes of balance, and 2) consistency of judgments of musical balance, and designed instruments to measure these abilities. The *Discrimination of Loudness Changes in Music* test (*DOLCIM*) measured a person's ability to hear changes of loudness of a single voice within a four-voice musical texture and also provided thresholds of audible intensity change for each voice for each individual subject. These thresholds became the criteria for assessing a subject's ability to make consistent judgments as measured by another instrument produced by this study, the *Consistency of Judgment of Musical Balance Test* (*CJMBT*).

The results of this study suggest that discrimination of balance and consistency of

judgments of musical balance are two separate abilities. Discrimination of balance may be similar to other forms of musical discrimination such as pitch discrimination in that it seems to be an individualized skill not affected by musical or conducting experience. The ability to make consistent judgments regarding musical balance, on the other hand, appears to be affected by both musical training and conducting experience. Because the ability to make consistent judgments of musical balance is considered to be necessary for conductors and because there is preliminary evidence that it might be improved by training, it was recommended that training programs be designed to enable inexperienced conductors to improve this skill.

Because this study was exploratory and used wind quartets as stimuli, the reader is cautioned against generalizing the findings beyond the sample and stimuli employed.

## THE IMPACT OF AN ANNUAL ACHIEVEMENT TEST ON INSTRUCTION IN ELEMENTARY CLASSROOM MUSIC

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In this research, the investigator studied the impact of a yearly competency test on instruction and achievement in elementary classroom music. A Basic Music Competency Test was administered in March of 1981, 1982 and 1983. The fourth grade students in thirty-five elementary school buildings in one district served as a sample for each year the test was administered. A brief questionnaire was distributed to all elementary music teachers in the district. Test results from student groups were analyzed by one-way repeated-measures analysis of variance. Teacher responses regarding number of objectives taught before and since implementation of the test were analyzed using chi-square statistics. Conclusions were that the test had very little effect on student achievement, and that some slight effect was perceived by teachers on their planning and teaching activities.

## A PROCEDURAL MODEL FOR THE TRANSFERRENCE OF ANALYTICAL INSIGHTS INTO VERBAL AND NONVERBAL COMMUNICATION IN CHORAL MUSIC

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The purpose of this study was to develop a procedural model for the choral conductor which presents in sequential fashion the various components contributing to choral artistry. It further provides solutions for transferring analytical information into verbal and nonverbal communication.

In order to accomplish effective transference (the major problem addressed) three primary areas which contribute to choral artistry were identified and analyzed, resulting in analytical tables entitled: The Four Levels of Score Analysis, Conducting and Choral Development. These became the organizational design of the study and the basis for the analytical procedures developed.

Part I is a presentation of the sequentially conceived components of each table and contains pedagogical recommendations for gestural and rehearsal transference. Chapter One provides a systematic plan for score study and concludes by posing two questions related to transference: (1) How will the musical style affect your conducting gestures? (2) What rehearsal and performance procedures can be used to reinforce the unique style characteristics of the music.

Chapter Two presents a coded gestural analysis system which isolates and defines gestural possibilities. This gestural shorthand system can then be used to select and record gestures which are appropriate to the stylistic dictates of the score.

The levels of choral development are introduced in Chapter Three. In addition, a rehearsal sequencing model is presented which is based on the ideal that the rehearsal of choral components should relate directly to the musical characteristics of the score in order to have an ensemble perform with appropriate technique and style.

Part II of the study is a prototype of the analytical procedures presented in Part I and uses the Renaissance motet, Ave Maria, by Josquin Des Pres as a style model. It can be concluded that the procedural model presented in this study can: (1) provide pedagogical tools for the training of choral conductors, (2) become an effective and comprehensive approach to the problem of transferring analytical insights to a chorus, and (3) provide a systematic and comprehensive design for the study of choral music.

# AN INVESTIGATION OF THE EFFECTS OF THE SOPRANO RECORDER DURING THE LEARNING INTERVALS IN BASIC MUSIC COURSES IN HIGHER EDUCATION

Lura Louise Helling Davidson
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The study investigated the effects of the soprano recorder as an aid during the learning of interval construction in basic music elements. Use of the recorder as an adjunct learning device permitted all students an opportunity to apply psychomotor practice and cognitive learning of visual stimuli concurrently during the formation and retention of relevant and meaningful musical concepts. Individual differences of visual comprehension and cognitive understanding of notation tended to influence the process of student behavioral change.

A 3 X 2 factoral design contained the following three major groups: Non-music major, vocal music major and instrumental music major. Each group was further divided into a treatment group (use of the recorder) and a control group (no use of recorder). Factoral analyses of covariance were used for each of the three learning tasks of interval presentation; harmonic, melodic ascending, melodic descending, and for the total assessment. There was a significant difference between the non-music major, no recorder and the instrumental music major, recorder used, during the presentation of the harmonic interval. Use of the recorder appeared beneficial in several interactions, but were not significant at the .05 level of confidence. Detailed findings and suggestions for further research appear within the report.

# J. SPENCER CORNWALL: THE SALT LAKE MORMON TABERNACLE CHOIR YEARS, 1935-1957

Fern Denise Gregory, Doctor of Musical Arts
University of Missouri-Kansas City

The purpose of this study was to determine the extent of J. Spencer Cornwall's influence upon the repertoire of the Salt Lake Mormon Tabernacle Choir.

J. Spencer Cornwall, director of the Salt Lake Mormon Tabernacle Choir from 1935-1957, was largely responsible for its emergence as a nationally known choir. During his tenure the Choir made its first stereo recordings, first television appearance, and first movie soundtracks, and the quality of the national weekly broadcast was greatly improved. Cornwall also took the Choir on its first European tour in 1955.

This study made a descriptive survey of ninety-eight choral arrangements by Cornwall. The majority were written for male voices and were hymn settings in the English language. The second largest number of settings were for SATB voices and typically expanded to eight parts and featured contrasting textures of women's and men's voices or the altos with four-part men.

One of Cornwall's most lasting contributions to the Choir was in the quality of literature performed. He added about 800 works to the repertoire. A comparison of radio broadcast literature was made for the years of 1947-1957 and 1957-1967 for Cornwall and Condie, his successor, respectively. A Pearson Product -Moment Correlation Coefficient (r) was computed for the

data in this study. A relationship of .6 or above was considered to be strong. For all octavos in the study r = .3. For all octavos with fifteen or more performances r = -.7 and for ten or more performances r = -.6.

## AN EVALUATION OF TENOR CLEF MATERIAL IN TWELVE EXISTING BASSOON METHODS AND A SYSTEMATIC APPROACH TO LEARNING TENOR CLEF FOR THE BASSOONIST

Debra Anne Jackson
Central Missouri State University

The advancing bassoonist encountering tenor clef has limited teaching material available at the present time. Most instruction in the reading of tenor clef appears in elementary methods which do not devote a proper amount of time to the development of this skill, nor do they present a proper sequence of note introduction. These methods often introduce a two-octave range of pitches at one time and include as few as four exercises to learn the new material. Chapter Two evaluates tenor clef material in existing methods.

The purpose of this study is to fill this void in bassoon teaching material. Chapters Four through Eight consist of exercises, etudes, and excerpts which involve the reading of tenor clef. The exercises and etudes were especially developed by the author for teaching the reading of tenor clef. Twenty-four short exercises introduce the pitches in tenor clef slowly, and in a logical order. Eighteen scale exercises are included in major and harmonic minor forms with various articulations, for development of facility. The following chapter includes six etudes in tenor clef which have a variety of intervals. These have specific articulations, tempos, and dynamics. Chapter Seven has six additional etudes with wider intervals and specific markings, but written in a combination of bass and tenor clefs. They include common problems found in material which involves the change of clef. The final chapter is a collection of excerpts from bassoon solos that use tenor clef.

This method is intended as a supplement to existing methods, and should be useful to the advanced high school or early college bassoonist.

## EVA TURNER, THE GRAND DAME OF SINGING: A STUDY OF HER LIFE AS A SINGER AND AS A TEACHER

Rose Mary Owens
Southwest Missouri State University
Doctorate, University of Missouri-Columbia

Eva Turner, born in Oldham, England in 1892, began her professional singing career in 1915 as a member of the chorus in the Royal Carl Rosa Opera Company. She soon established herself as the prima donna of this provincial English opera touring ensemble. In 1924 one of Arturo Toscanini's assistants heard her sing in London and urged her to leave at once to sing for the Maestro at the Teatro alla Scala in Milan, Italy. Toscanini engaged her immediately upon hearing her; and from those first performances in Italy her singing commanded the respect of audiences, colleagues, and conductors. Her singing of operatic roles throughout England, Western Europe, Brazil, Argentina, Venezuela, and the United States during the inter-war years was notable in that she was the only English-born dramatic soprano to achieve this status. She performed such roles as Aida, Santuzza, Sieglinde, Agathe, and Isolde; but persons knowledgeable of her contributions to opera and singing continue to speak and write of her singing of the lead in Puccini's Turandot. Her performance of the title-role in this composer's final opera remains the yardstick by which all other executants of this role are measured.

Her second career began in 1949 when she was employed by the University of Oklahoma as a Visiting Professor of Voice. She remained in this position for ten years before returning to teach at her alma mater, the Royal Academy of Music in London, and to teach privately in her home. It is often true that singers who establish themselves in opera or upon the concert stage do not make the conversion into a teacher of the same quality. Happily in Eva Turner's case, this generalization has not applied. Her background for becoming a teacher of excellence was enhanced because she realize early in her career the necessity of establishing and maintaining an infallible singing technique.

Her highest non-singing honor came in 1962 when Queen Elizabeth II conferred upon her the title of Dame Commander of the British Empire.

# SELECTED POSTSECONDARY INSTITUTIONS' PRESENTATION OF MUSIC COMPOSED BY BLACK AMERICANS

Jacqueline Kay Thompson, Doctor of Musical Arts
University of Missouri-Kansas City

The problem of this study was to determine whether a postsecondary institution's method of presenting music composed by Black Americans is related to the music education student's knowledge of this music. Secondary problems were to determine whether a relationshp existed between the institution's demography and its method of presenting this music; further, to determine whether a relationship existed between the demography of these postsecondary institutions and the music education students' knowledge of music composed by Black Americans.

A questionnaire was constructed to survey the five different methods used by postsecondary institutions to present music composed by Black Americans: courses, performances by student/faculty, performances by guest artists, library holdings, and special presentations such as festivals, symposia, workshops, in-service training. In order to measure student knowledge of music composed by Black Americans, a test was designed in which each of 25 composers was to be matched with one of their compositions.

Subject to the circumstances and limitations of this study, the following conclusions were drawn for the problem examined in this study:

1. Demography (private or public control, NASM membership, degree offered in music educa-

tion, region of the country, number of music education majors, and the percentage of Black undergraduate students) was related to the institution's method of presenting music composed by Black Americans. In this study, an institution's regional location had the greatest effect on the number of institutions presenting student/faculty performances, guest artist performances and special presentations of music composed by Black Americans; an NASM member school was more likely to have library holdings of this music; and if an institution offered a degree in music education, then a course which included music composed by Black Americans was more likely to be offered.

2. The students who attended institutions with a higher percentage of Black undergraduate students achieved higher scores on the Identification Test than those who did not.

## IT IS NEARER AND FARTHER THAN THEY

## A Comparison of Analytic Techniques as Applied to Pitch in Edgard Varese's Arcana

Kris Thompson, M.A.
Central Missouri State University

Numerous analytic techniques and a plethora of specialized analytical studies are currently available. These analyses are most often classified as being either stylistic and critical analyses provide understanding to musicians, another analytic category, pragmatic analysis, attempts to provide understanding to listeners. This study attempts to determine which of the principal analytic methods are most useful in pragmatic analysis. The contention is that the more an analytic method applies to a particular compositional process or a specific work, the less understanding it provides about music and its aural perception, and therefore the less it contributes to pragmatic analysis. This thesis is tested by applying tonal analysis, structural analysis, set-theory analysis, thematic analysis, and a special method of analysis devised by Jonathan Walter Bernard, to selected passages of Edgard Varese's Arcana. Considering the analytic results with regard to Gestalt perceptual theory substantiates the original thesis. The study concludes that whereas analysis does provide understanding, understanding cannot instill meaning.

## AN INVESTIGATION OF NATURAL MALE VOICE AND FALESETTO MALE VOICE ON FOURTH GRADE CHILDREN'S ABILITY TO FIND PITCH LEVEL

Judy Heinrich Wolf, Master of Music Education
University of Missouri-Kansas City

The problem of this study was to determine whether fourth grade students can find pitch level and tonality more accurately when the pitch is given by a natural male voice model or a falsetto male voice model.

A repeated measure design was used for generating data. The sample consisted of 108 fourth grade students from three schools in Kansas City, Kansas. Six "items," each consisting of a song phrase, the starting pitch, and the "ready, sing" instruction, were prerecorded by natural and falsetto male voice models. Students sang each of the items after hearing the male voice model (falsetto or natural) on the pre-recorded tape. Children's responses were recorded and alter rated on intonation by three judges. An analysis of variance, mutliple analysis of variance, and *t*-test were used to test the null hypotheses. Conclusions from the results of the data analysis were as follows:

1. Children find pitch level and tonality with a higher rate of accuracy when the pitch is given by a falsetto male voice model.

2. Children's pitch accuracy is not affected by the quality (excellent, good, or poor) of the falsetto male voice model.

3. There is no significant interaction between the sex of the subject and the male voice model (natural vs. falsetto).

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## PREFACE

The Missouri Journal of Research in Music Education, published by the Missouri Music Educators Association, is devoted to the needs and interests of teachers of music in Missouri and the nation. This issue, Volume V, Number 3, is the twenty-third.

The members of the editorial committee are grateful to those readers who have written suggestions concerning the content of past issues and request that criticisms and suggestions again be sent to the editor concerning the content of this issue. We strive for a reasonable balance among music theory, history, philosophy, aesthetics and pedagogy.

We express our deep gratitude to the Missouri Music Educators Association for their financial support to make it possible to continue to publish the Missouri Journal of Research in Music Education.

The Editorial Board

# EFFECT OF IMPROVISING IN GIVEN RHYTHMS ON PIANO STUDENTS' SIGHT READING RHYTHMIC ACCURACY ACHIEVEMENT

David R. Montano
University of Denver

Exercises used in music improvisation study often present some notated music that is to be embellished, varied, or in some other way incorporated in extemporized pieces. One study has been conducted to determine the effect of a specific program of such improvisation exercises on achievement in sight reading fully notated pieces. In that study, Wilson (1970/1971) reported that ensemble improvisation exercises with given formal outlines and choices of notated harmonic and melodic figures positively affected high school instrumental students' pitch and rhythmic accuracy achievement in sight reading. However, no other studies have extended Wilson's research.

The purpose of the present study was to test exercises in improvisation of pitch material within given rhythm notations for their effect on rhythmic accuracy achievement in sight reading fully notated music for a sample of college elementary group piano students. The exercises studied simulate a requirement for improvisation of pitches that sometimes occurs during music sight reading which is directed in particular toward the achievement of rhythmic accuracy. Specifically, the requirement in sight reading which is simulated is that the student improvise pitches of the full notation whenever necessary to avoid sacrifices in rhythmic accuracy that might be caused by stops or pauses.

In this study, the correlations between pitch and rhythmic accuracy achievements for students in the sample who used the improvisation exercises and for students in the sample who did not use them were also examined. In addition, the respective relationships between sight reading rhythmic accuracy achievement and seven experiential, attributive, and categorical variables were studied. Leadership status was included as an attributive variable in view of a finding by Luce (1965) of a correlation between sight reading scores and leadership status as given in ratings by teachers for a sample of high school instrumental ensemble students.

## Method

### Subjects

An experimental pretest-posttest control group design was used, with 32 University of Denver undergraduates from four music major piano classes and two non-music major piano classes serving as subjects. Subjects enrolled in each class were assigned by means of a table of random numbers to the experimental group ($\underline{N}$ = 17) or the control group ($\underline{N}$ = 15). Thus, each of the two treatment groups included students from each of the six classes.

### Procedure

Each group received six weekly treatments. The experimental group treatments consisted of practice in sight reading fully notated music and in improvising the pitches within given rhythm notations. The control group treatments consisted of practice in sight reading fully notated music only.

Treatment sessions were held in an electronic piano laboratory and were scheduled for times separate from regular class meetings. The investigators served as instructor and followed pre-designed lesson plans to control for possible instructional bias.

## Experimental Group Treatment

Experimental sessions were 30 minutes in duration. The first 15 minutes of each session were used for the improvisation practice and the second 15 minutes for the sight reading practice. A five-minute review of tapping and syllable chanting for selected rhythm values and groupings immediately preceded the first session.

Twenty-nine rhythm notations for pieces in which the pitches are to be improvised were used in the improvisation practice. The notations, which were written by the investigator, variously indicate four types of musical texture: (a) a single-line melody alternating between the hands, (b) two lines melodically and rhythmically parallel, (c) two lines not melodically or rhythmically parallel, or (d) a melody line with accompaniment of tonic I and dominant $V^6/5$ chords. The notations were patterned in part after models in textbook compilations by Erlings (1975a) and Ross (1978).

The subjects played each improvisation in ensemble in a tempo set by the investigator. They played with headphones on and loudspeakers turned off so that each player would not hear the playing of other subjects. The subjects were directed to keep the rhythm as accurate and the tempo as steady as they could in their playing. They were also specifically instructed not to hesitate or stop to correct any errors.

Before playing each improvisation, the subjects were given a major or minor key and upper and lower pitch limits for determining pentachord hand grouping positions. For exercises of the fourth type of musical texture they were also instructed to locate left hand I and $V^6/5$ chord positions. The investigator then gave the subjects verbal feedback pertaining to correct pitch spellings of the specified positions. Before playing improvisations for selected rhythm notations, the subjects also used tapping and syllable or metric beat chanting to read the rhythms of those notations in ensemble in tempos set by the investigator.

The subjects were directed to practice the improvisation exercises used in the sessions, and other similar ones distributed to them, for five minutes per day during their regular practice times outside of class.

Thirty-two fully notated pieces contained in texts by Erlings (1975b), Lyke et al. (1979-1980), and Bastien and Bastien (1968) were used in the sight reading practice. The pieces variously represent the same four types of musical texture which are indicated by the improvisation exercise notations.

The subjects played each sight reading piece in ensemble in a tempo set by the investigator. They played with loudspeakers turned on and without headphones. The subjects were directed to keep the rhythm as accurate and the tempo as steady as they could in their playing. They were also specifically instructed not to hesitate or stop to correct any errors and to improvise any pitches they may need to in order not to sacrific rhythmic accuracy.

Before playing each sight reading piece, the subjects were directed to determine chord or pentachord positions required. The investigator then gave them verbal feedback pertaining to correct pitch spellings of the required positions. Before playing selected pieces, the subjects also used tapping and syllable or metric beat chanting to read the rhythms of those pieces in ensemble in tempos set by the investigator.

### Control Group Treatment

Control sessions were 15 minutes in duration. Each session consisted of the same sight reading treatment that the experimental group received for the corresponding week. The control group did not receive the improvisation treatment. A five-minute review of tapping and syllable chanting for selected rhythm values and groupings, which was the same as the review given in the experimental group, immediately preceded the first session.

## Evaluation Instruments

All subjects were individually administered two playing tests written by the investigator. One test served as pretest and posttest of rhythmic accuracy and of pitch accuracy in sight reading fully notated music. The other test served as pretest and posttest of rhythmic accuracy in improvising the pitches within given rhythm notations. Each of four pieces or rhythm notations in each playing test represents one of the four types of musical texture included in the treatment materials. Each improvisation test item also includes worded indications for a major or minor key and upper and lower pitch limits for determining pentachord hand grouping positions.

Before playing each test item, the subject was given 60 seconds to visually scan the item and determine a tempo. The subject was instructed to keep the rhythm as accurate and the tempo as steady as he or she could.

All test performances were tape recorded. Scoring for the recorded performances consisted of determining and tallying errors according to a set of scoring standards and procedures which were patterned in part after a model by Erlings (1973).

To study the scoring reliability of the investigator for each pretest and posttest measure, scores determined by the investigator for a random selection of 11 of the subjects were compared with the averages of scores determined by two outside judges for the same subjects. Correlation analysis used in the comparisions revealed coefficients which ranged between $\underline{r} = .97$ and $\underline{r} = .99$.

Test-retest reliability correlations were calculated for playing test scores of an independent sample of 10 subjects. Coefficients were $\underline{r} = .92$ for the test of rhythmic accuracy in sight reading, $\underline{r} = .99$ for the test of pitch accuracy in sight reading, and $\underline{r} = .94$ for the test of rhythmic accuracy in improvising.

To study the content validity of each test, tabulated descriptive data about the musical characteristics of the test items were compared with tabulated descriptive data about those characteristics of the treatment items. The investigator concluded that test items were sufficiently representative of treatment material content.

In addition to the playing tests, the evaluation instruments included a questionnaire pertaining to the amount of previous experience reading music in playing instruments or singing (number of half-years), the amount of previous piano instruction (number of months), and the amount of previous instruction in college music theory (number of courses).

Completing the evaluation instruments was the California Psychological Inventory (CPI, Gough, 1975a). CPI standard scores on the Achivement via Conformance (AC) scale and Leadership (LD) index, which served as measures of achievement motivation and leadership status, respectively, were used as data.

Gough (1975b) and Hogan (1978) give reliability and validity statistics from various studies of the CPI measures. Gough (1975b) also describes three scales of the CPI which provide a means to detect distorted responses that are interpreted as invalidating a subject's scores. CPI responses of five subjects in the present study were detected to be distorted and their CPI scores were deleted from the data.

## Results

Results of statistical analysis of the data indicated that the experimental group exhibited greater rhythmic accuracy achievement than the control group in sight reading fully notated music. Analysis of covariance (ANCOVA) revealed a significant difference (.05 level, df = 1, MS = 246.29, F = 6.12) between treatment groups in mean adjusted posttest sight reading rhythm scores. In the analysis, subjects' posttest scores were adjusted for differences in pretest sight reading rhythm scores, pretest sight reading pitch scores, pretest improvisation rhythm scores, and amounts of previous experience reading music in playing instruments or singing (where amounts were grouped in three levels). The experimental group mean adjusted deviation from predicted number of errors was negative (-2.93, M errors = 10.82, SD = 10.56) and that for the control group was positive (3.32, M errors = 19.73, SD = 13.46).

To study the correlation between sight reading pitch and rhythmic accuracy achievements for each group, Pearson correlations were computed between pitch and rhythm residual gains. The residual gains were obtained through stepwise regression analyses of data from the entire sample. Independent variables entered in the regressions were pretest scores, reading experience, and treatment group. The correlation between pitch and rhythm gains for the control group ($r$ = .50) was significant (.05 level) but that for the experimental group ($r$ = .27) was not.

Partial correlation analysis revealed a significant (.05 level) correlation ($r$ = .40) between amounts of previous music reading experience (where amounts were grouped in three levels) and posttest sight reading rhythm scores after adjustment for differences in pretest sight reading rhythm scores. Thus, a greater amount of reading experience was likely to be associated with a lower adjusted number of posttest rhythm errors. However, there were no significant partial correlations between similarly adjusted posttest sight reading rhythm scores and grouped data for previous piano instruction ($r$ = .23) or grouped data for previous theory instruction ($r$ = .02).

Partial correlation analysis revealed no significant correlation ($r$ = -.04) between CPI LD index standard scores and posttest sight reading rhythm scores after adjustment for differences in pretest sight reading rhythm scores.

There was also no significant partial correlation ($r = .04$) between CPI AC scale standard scores and similarly adjusted posttest sight reading rhythm scores.

ANCOVA revealed no significant relations between adjusted posttest sight reading rhythm scores and academic major (music or non-music; $df = 1$, $MS = 0$, $F = 0$) or between adjusted posttest sight reading rhythm scores and piano course level (second level music major, fifth level music major, or second level non-music major; $df = 2$, $MS = 7.44$, $F = .12$). In the analyses, subjects' posttest scores were adjusted for differences in pretest sight reading rhythm scores.

## Discussion

Exercises in improvising the pitches within given rhythm notations appeared to postively affect rhythmic accuracy achievement in sight reading fully notated music for the sample of piano students in this study. It would seem that a piano course for similar students which includes the exercises in improvisation study could at the same time use them to influence sight reading rhythmic accuracy achievement.

It appears from other results of this study that the use of the improvisation exercises may be expected to result in rhythmic accuracy achievement in sight reading that would not be accompanied by correlated pitch accuracy achievement. At the same time correlated pitch and rhythmic accuracy achievements may result if the improvisation exercises are not used, but the rhythmic accuracy achievement might be expected to be less than when the exercises are used. Instructors can consider that when segments of sight reading practice are organized for the primary purpose of rhythmic accuracy achievement the improvisation exericses might be of particular interest for use in influencing that achievement.

It must be cautioned, however, that this study was not designed to compare the effect of the improvisation exercises on sight reading rhythmic accuracy achievement with the effect of an equal amount of increased practice sight reading fully notated music on that achievement. It was designed only to determine whether the improvisation exercises can be expected to influence rhythmic accuracy achievement in sight reading while being used in improvisation study.

Other analyses showed that total music reading experience was significantly related to rhythmic accuracy achievement for the students in this study but that amount of previous piano instruction was not. This combination of results is in agreement with a similar finding by Pottenger (1969) in a descriptive study of instrumental students. In that study Pottenger found that experience with a particular instrument was not related to the students' rhythm reading skill as strongly as was total experience in instrumental music.

Leadership status as measured by the CPI Leadership Index is among the five other attributive, experiential, and categorical variables which showed no relation to sight reading rhythmic accuracy achievement in this study. Luce (1965), however, found a correlation between sight reading scores and leadership status as given in ratings by teachers for a sample of high school band and orchestra students. An explanation for the differing results may be that the measure used by Luce was a subjective one, whereas the CPI is an objective measure by design. However, it may be that leadership status is related to sight reading achievement for band and orchestra students but not for group piano students.

This study should be replicated with a larger sample. Since the sample in the study was small, the results must be accepted with caution. An extension of the study could test whether improvisation of pitches within rhythm notations on three or four single-line staves would have an effect on rhythmic accuracy achievement in sight reading piano music of three- or four-voice texture, or in sight reading three- or four-part open scores of instrumental or vocal literature.

## References

Bastien, J.W., & Bastien, J.S. (1968). *Beginning piano for adults*. Park Ridge, IL: General Words and Music.

Erlings, B. (1975a). *Comprehensive keyboard skills, unit I: Improvisation packet*. Tucson: Nuove Music.

Erlings, G. (1975b). Comprehensive keyboard *skills unit I: Reading/repertory A packet*. Tucson: Nuove Music.

Erlings, B. (1973). *An investigation of relationships between elementary keyboard sightreading achievement by music majors in college and selected musical profile tests*. Manuscript report of research project funded by Stephen F. Austin State University.

Gough, H.G. (1975a). *California Psychological Inventory*. Palo Alto, CA: Consulting Psychologists Press.

Gough, H.G. (1975b). *Manual for the "California Psychological Inventory"*. Palo Alto, CA: Consulting Psychologists Press.

Hogan, J.L. (1978). Personological dynamics of leadership. *Journal of Research in Personality*, *12*, 390-395.

Luce, J.R. (1965). Sight-reading and ear-playing abilities as related to instrumental music students. *Journal of Research in Music Education*, *13*, 101-109.

Lyke, J., Elliston, R., & Hartline, E. (1979-1980). *Keyboard musicianship, group piano for adults* (3rd ed., Vols. 1-2). Champaign, IL: Stipes.

Pottenger, H.P. (1969). An analysis of rhythm reading skill (Doctoral dissertation, Indiana University, 1969). *Dissertation Abstracts International*, *30*, 1590A-1591A. (University Microfilms No. 69-16,643)

Ross, L.M. (Ed.) (1978). *Class piano materials.* Unpublished packet of study materials for the class piano 110 course at the University of Missouri-Kansas City.

Wilson, J.H. (1971). The effects of group improvisation on the musical growth of selected high school instrumentalists (Doctoral dissertation, New York University, 1970). *Dissertation Abstracts International*, *31*, 3589A. (University Microfilms No. 7-26,466)

# INVESTIGATIONS OF A ONE NOTE - ONE NAME RHYTHM READING INSTRUCTION MODEL

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Music education literature is teeming with research about the development of rhythmic responses. Surprisingly little research is concerned with ways teachers can assist students learn to read and understand notated rhythm. Those studies that do exist suffer weak designs or poor control over the treatment. Having at hand an instructional model that seems to provide tight control over the instruction (treatment) and a music teacher committed to improving the quality of music instruction in her school the investigator seized the opportunity to see if the model worked under normal school conditions. The question to be examined was whether students from the general population learn to read rhythmic notation when instruction prepared according to the One Note - One Name (ONON) rhythm reading instruction model was used.

## Background of the Study

The question of translating notation into its sound equivalent is a problem in reading. Prerequisite learning is necessary for successful note reading just as certain prerequisite for rhythm reading success are: knowledge of the concepts to be represented by the symbols, physical ability to produce the sound equivalent, and visual acuity necessary to decode the symbols. Given that these three conditions are met, the subjects should read successfully if instruction is effective.

To begin rhythm reading we assume visual problems have been apprehended and dealt with outside of the music class or we would have been notified that a given student has a visual deficiency. The teacher has verified that prerequisite learning has been mastered through the administration of competency tests that show that the subject can pick positive examples of even division of time, uneven divisions of time, steady state tempo, changing state tempo, and identify different durations of sound and silence from sets of mixed examples. The teacher has observed that each student can make the physical response of producing a word or syllable and is therefore ready to emit some sound in response to the notation of rhythmic examples. If all conditions have been met, rhythm reading instruction can begin.

For the purposes of this research it was assumed that these prerequisites had been met. Assuming this readiness, what are the difficulties inherent in the process itself? One difficulty, as in word reading, is that the reader is constantly faced with the need to make a decision about the symbol and make the appropriate response. Even the comparatively easy task of reading a series of "same note values" requires that the reader hold in mind a set of discrete responses and, as each symbol in the series is viewed, select the appropriate response for that symbol.

Music reading demands deliberate, or as Sloboda describes it, "intentional" action (1985, p. 200). In reading notation the reader, upon observing the symbol, intentionally starts a sound or a period of silence and continues the sound or silence for the appropriate amount of real time. Music educators generally have not stressed the relationship between the need to continue the sound or silence for a period of real time as is shown in the prevailing practice of having the reader "clap" the rhythm. Clapping has no durational value. Such a reading method focuses only on the point of articulation. The use of syllables that have vowel sounds that can be prolonged for the requisite period of time allows the student to develop the ability to intentionally start a sound, maintain it for a required amount of time and end it promptly or to intentionally maintain silence for a period of real time.

Silence presents a particularly difficult problem. Some ensemble conductors complain that humans do poorly when they estimate real time during a period of silence. Lack of practice may account for this behavior and, if that is so, more effective early training may prevent it. Practice is a critical issue in the One Note - One Name rhythm reading instruction model (Jetter, 1974). Silence symbols, or "rests," receive as much attention and practice as sound symbols, or "notes."

In this instructional model provision is made to teach the sound duration symbol and the silence duration symbol in tandem so the student has early practice in intentionally making or withholding sound for a designated amount of time. If, in practice reading exercises the only use of rests is at the end of a phrase where the performer usually breathes anyway, the reader is not going to learn that there is to be an "intentional" silence when a rest is read.

Unless there is a deliberate effort on the part of the instructor to associate the syllable name with a specific symbol within an accepted time relationship learners often harbor the idea that the durational relationships that exist in ordinary speech can be used. The reader must observe the dictum that, using "ta" as the syllable that will convert the quarter note into sound, "ta" must last for an equal amount of time every time it is translated. Language does not observe this dictum and if the reader adopts language rules the intentional behavior required in music reading will not appear. In the words "A cape lay on the seat," "a" does not indicate the same amount of time value each time it appears. The first "a" will be "short" compared to the "a's" in "cape" and "lay," and will have not time value at all in "seat." The idea that musical rhythm derives from speech must be reexamined. It conflicts with the possibility that development of musical rhythm may have been associated more with dance than speech. The ONON model avoids the pitfalls of the language-rhythm association position.

## Instructional Model

The basic plan for the model is the forward chaining procedures described by Gagne (1962). One bit of information is given and the response practiced. After the second bit of information is given and the response practiced, it is linked to the first bit of information and the two responses are practiced as a chain. As each new bit of information is added after the second, it is added to the growing chain of behaviors and practiced until the starting behavior becomes the cue to run off the whole chain of responses.

The procedure is modified in the case of behaviors such as reading. At each link in the chain the reader has to monitor the situation and make a decision as to which of the behaviors already learned is to be executed next. Therefore the chain is not a sequence of behaviors that will not vary from occasion to occasion but one in which some signal from the environment (a note or rest in the case of music reading) calls for one or another of a set of responses (the "intentionality" of Sloboda's description). For example, after performing a quarter note the music reader may see any of several different symbols that indicate the next behavior to be performed. The reader must identify the significance of the symbol, decide on the behavior it indicates, and perform the behavior.

In learning to do this matters are facilitated by keeping the response set as limited and specific as possible. In the ONON model a quarter note is always read as "ta," an eighth note is always read as "tay," and the half note is read as "too." This reduces the number of decisions the reader must make about the appropriate response. Word readers often experience difficulty when the same symbol, e.g., the word "read," is read differently and means different things under different circumstances. The word reader is rescued by cues from the context in which the word is used ("Read page one." "I read a good book last night.") Seldom can rhythm readers rely on context to assist them. As they are learning to read they may be still learning the context or lexicon of music itself. Therefore the use of the same syllable for the same symbol throughout rhythm reading was judged to be of paramount importance in the design of the instructional model.

There are rhythm reading instructional models that change the name of the symbol according to some other scheme. When "counting" models, where the response changes according to position in a measure, are used, students often ask why one eighth note is called "two" while another, also an eighth note, is called "three." One can sympathize with their bewilderment.

Other rhythm reading plans fall into the same trap. In one popular model students are asked to call the eighth note "tee" under the same circumstance and "pah" under other circumstances with little reason apparent to the student for doing so.

Perception of duration is probably altered by the choice of the consonant that articulates the sounds (see Sloboda, 1985, p. 29). The letter "t" provides a good articulator for the syllables to be used as responses. Perception of the amount of duration may be poor if the first modeling in rhythm reading is unclear. If the teacher's voice is too quiet, the consonant not clearly enunciated, or the classroom too noisy some students may not receive an adequate demonstration of duration. Again, in the case of speech, context may provide good clues as to what the consonant probably was. In music, where context is not very helpful for beginners, it appears that it is especially important to use the most effective articulators, the "t's," "n's," etc. In this study only four note values and their comparable rests were taught: quarter note ("ta") and quarter rest, eighth note ("tay") and eighth rest, half note ("too") and half rest, and sixteenth note ("nee") and sixteenth rest.

## The Study

The question that initiated the study was: Can students from the general population learn to read the rhythmic notation when the ONON model materials are used by their regular music teacher? The purpose of this investigation was to compare pretest and posttest achievement of third grade students who had learned to read rhythm notation with instruction designed according to the ONON model requirements. A pretest-posttest design was used to generate data.

The school in which the investigation was conducted serves a middle class, mostly white neighborhood. Facilities indicate the district is supportive of education. The teacher in this school is an experienced teacher. In addition, in the period of time during which the experiment was conducted a student who had been trained to use the materials during her teacher training was in the school on her student teaching assignment. Subjects were 87 students from the four third grade classes (aged 9-10 years) housed in this school. It was necessary to use intact groups because of the academic schedule of the school. This resulted in an experiment with three simultaneous replications.

A pilot study with fourth grade students as subjects gave the teacher the opportunity to use the script as it would be used in the formal study and to try out testing procedures. During the pilot testing it became apparent that the test did not allow for testing all members of a single class during the same music class session. To avoid the problem of testing on two different occasions and the contamination introduced by testing under different conditions it was decided to reduce the number of items to which each student would respond. It was apparent that a smaller number of items would be enough to show whether the subject had learned to read with accuracy or note.

Eight 8-measure tests were prepared (see Appendix A). Each measure was counted as one item. Subjects used any syllable ("la," "loo," etc.) on the pretest. On the posttest they used the syllable learned in the instruction. Responses were tape recorded for both the pretest and posttest to allow the investigator, teacher and outside observer to review the evaluations. Although the scoring procedure was not as rigorous as use of electronic scoring might have been it represented the kind of measurement that can be carried out in the normal school setting. Indeed if the teacher is a qualified musician the rating ought to be representative of the standard held by consensus of musicians in general. While judging the quality of the performance recorded on tape the auditor was not aware of the individual whose performance was being evaluated. The number of correct syllable names was recorded for each subject and the ability to maintain a steady tempo observed and rated, giving two scores for each subject.

Data gathering was carried out between January 15 and April 15, 1985. About fifteen minutes of the regular music class was used for the experimental treatment. The rest of the class time was used for other music study and activities not associated with rhythm training. Testing was carried out in the classroom with students seated on risers. Each student came up to the front of the room where the investigator and tape recorder were placed, drew a test from the pile, picked up the microphone, said his or her name, and read the test sheet. Seventy-eight percent of the subjects who had had no private instruction (N=69) read the syllable names with no errors after instruction. Ninety-nine percent read the test exercise with four or less errors.

"Name calling" is described as "signal recognition" by Gagne (1962). Unless provision is made to control for it the chances that the learner will acquire only a "verbalism" are high. A verbalism is the ability to say the name of the stimulus but not understand all of its implications, that is, the student cannot use the information. This fact by itself may account for most of the poor rhythm accuracy of many performers. The tendency to teach only verbalisms is common in most of the rhythm reading instructional models. Therefore the ability to simultaneously adjust the duration of the sound while naming the symbol was of interest and performances were evaluated for the accuracy of the duration of each sound or silence. The results were interesting. Subjects were reading the material in "chunks." Within each chunk symbols were correctly named and accurately performed. Then, after a pause, another chunk was read with accurate naming and accurate time values. Only two subjects read the eight measure exercise with only one stop. One of these subjects reported he had "lost his place" and had to stop; the other clearly read the whole exercise in two chunks.

This chunking had not been anticipated although both experience and literature should have led us to expect it. Sloboda reports a study by Smith (1983) who found that subjects who listened to musical examples and then attempted to reproduce the example did so differently if they were trained musicians than if they were nonmusicians. Nonmusicians "grouped" according to what they heard, in the same way words in speech are grouped according to poetic feet. Musicians appeared to apply their knowledge of notation and thus grouped according to the metrical group they anticipated, content to use normally unaccented sounds as "pickup" notes and arrange grouping according to the first accented sound. According to Smith,

> Many subjects reported using a "counting" strategy, tallying the number of sounds that formed a group, and the number of such groups in a sequence. This meant that although they might tap out the correct number of sounds, the intervals within and between groups of sounds were distorted. (Sloboda, p. 187)

It is unclear at this point whether the phenomenon will disappear with more practice or if some instructional intervention will be required to produce readers who can read continuously. Such information might be revealed in a time series study of the way chunking strategies change from the beginning stages of practice until expertise is attained. In fact the total disappearance of such chunking may be what we refer to as "expertise."

In this study subjects were allowed to chunk as needed on the posttest. They seemed to adhere to some internal time clock during their reading performance. This was demonstrated in the fact that the pause between chunks took the form of a multiple of the time unit that the subject used for the rest of the exercise. About 20% exhibited only modest development of this internal timing. Four out of the eighty-seven subject exhibited no evidence of an internal timing. It was observed that these four read the syllable names of the note values and gave approximate duration to each but the durational value was not accurate and the underlying timing scheme was erratic.

Subject to the circumstances and limitations of this study it was concluded that the instruction prepared according to the ONON model and delivered by the regular classroom music teacher was effective for the tasks the subjects were asked to do. It was also concluded that the "chunking" phenomenon required more study.

## Reference

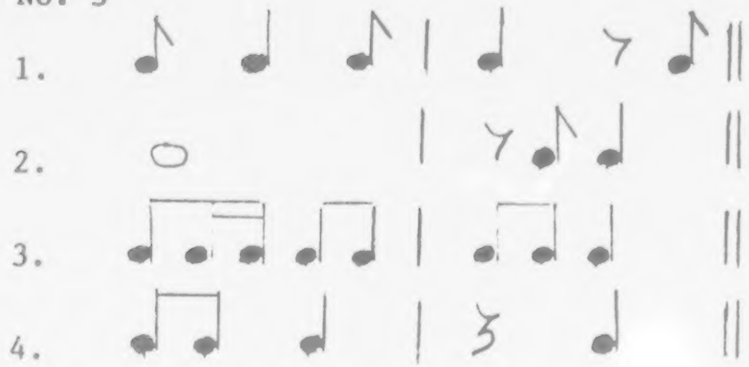
Gagne, R.M. (1962). The conditions of learning (2nd ed.). New York: Holt, Rinehart and Winston.

Sloboda, J.A. (1985). The musical mind. Oxford: Clarenden Press.

Smith, J. (1983). Reproduction and representation of musical rhythms: the effects of musical skill. In The Musical Mind (J.A. Sloboda). Oxford: Clarenden Press.

## Appendix

Test No. 3



# DIMENSIONS IN THE MEANING OF CHORAL EXPERIENCE: A REEXAMINATION

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The meaning of various forms of human experience has attracted the attention of psychologists, philosophers, theologians, educators, and others, for centuries. From its earliest period, U.S. public school music education has advanced on the assumption that meaningful experiences are provided for participants.

Much has been written about the meaningfulness of experiences in music education. Various authors (e.g. Knieter, 1971; Leonhard and House, 1972; Reimer, 1970) have suggested systems through which meaningful experiences in music education may be provided for participants. Leonhard and House stated that without meaning there can be no learning (p. 122). Nevertheless, little research has been published concerning participants' perceptions of the meaning of musical experience.

Farrell (1972) investigated the meaning of recreational experience in singing for urban adults. She developed statements concerning the meaning of choral experience through the use of open-ended questioning. A sixty-seven item scale for measuring the meanings of choral experience was constructed and adminstered to adult participants in several recreational singing groups. Farrell found eight underlying factors in their perceptions of the meaning of choral singing experience. She labeled these factors integrative, spiritualistic, incidental, communicative, music purist, social status, psychological, and collective. Farrell then used principal components inverse factor analysis to reveal seven significant singer types, labeled the Happy Fella, the Music Missionary, the Proud Groupie, the Music Addict, the Music Achiever, the Earnest Musician, and the Music Acculturalizer.

A more recent study (Hylton, 1981) examined the meaning of high school choral singing experience for student participants. A Likert-type scale was developed and tested by the researcher and administered to 673 Pennsylvania public high school choral students in 14 ensembles. Principal components factor analysis with oblique rotation yielded six interpretable factors in the meaning of high school choral singing experience. These dimensions were labeled achievement, spiritualistic, musical-artistic, communicative, psychological, and integrative.

The purpose of the present study was to reexamine the efficacy of a multidimensional conceptualization of the meaning construct, using the *Choral Meaning Survey* (Hylton, 1981). This was accomplished by administering the *Choral Meaning Survey* to a sample of students from parochial schools in a Midwestern metropolitan area. Comparisons were made between responses obtained in the 1981 study (for which the data were obtained in 1979), and the responses of the choral participants in the present investigation.

## Procedure

Subjects for this study were members of choral ensembles in Archdiocesan high schools in the greater St. Louis area (N=847). Each subject completed the survey, under the direction of his or her choral director. All St. Louis area Archdiocesan high schools offering choral music in their programs were contacted. The surveys were mailed to 24 high schools in April, 1983. Initially, 18 schools responded to the survey. After a second contact by telephone, two additional schools responded, giving a total of 20 out of 24 schools, or 83%. In each of the participating schools, all choral students were asked to complete the survey.

Evidence concerning dimensionality was determined through factor-analytic methods (Harman, 1968). Factor analysis constitutes a means of describing data in a parsimonious fashion. Factory-analytic techniques may reveal theoretical issues of unidimensional versus multidimensional conceptions. Principal components analysis with oblique rotation was chosen as the solution which best reflected both theoretical expectations and prior empirical research. The data analysis was accomplished at the Computer Center at the University of Missouri at St. Louis.

In deciding the number of factors to extract, several criteria were considered. Cattell's scree test was performed to determine a leveling off of variance explanation by succeeding components. The eigenvalues of the principal components were examined to determine the point at which additional variance explained by succeeding components was negligible. Also, the components were examined in terms of interpretability and theoretical plausibility. Using these criteria, six factors, accounting for 51.3% of the total variance, were extracted.

## Results

To facilitate explication of the results of this study, the factor analysis will be discussed in terms of the unrotated factor structure, the oblique rotation factor pattern, and the intercorrelations among factors.

### The Unrotated Factor Structure

The unrotated factor structure is presented in Table 1. A first generic factor explains 62.2% of the common variance. Although every item from the survey relates most strongly to the first factor, some of the statements also relate to other factors, which may be identified more clearly after oblique rotation. The presence of the strong generic factor suggests that the other factors, or dimensions, are interrelated, though distinct.

Table 1

Unrotated Factor Structure

| | F1 | F2 | F3 | F4 | F5 | F6 |
|---|---|---|---|---|---|---|
| Statement 1 | .52 | | | | | |
| Statement 2 | .53 | | | .42 | | |
| Statement 3 | .45 | | | | | |
| Statement 4 | .53 | | | | | |
| Statement 5 | .55 | | | | | |
| Statement 6 | .44 | | | | | .37 |
| Statement 7 | .45 | .31 | | .32 | | |
| Statement 8 | .47 | | | | | |
| Statement 9 | .48 | | | | | |
| Statement 10 | .46 | | .30 | .38 | | |
| Statement 11 | .55 | | | | .41 | |
| Statement 12 | .56 | | | | .38 | |
| Statement 13 | .57 | | | | .38 | |
| Statement 14 | .41 | | | | | |
| Statement 15 | .57 | | | | | |
| Statement 16 | .47 | | | | .33 | |
| Statement 17 | .59 | | | | | |
| Statement 18 | .50 | | .33 | | | |
| Statement 19 | .48 | | .41 | .32 | | |
| Statement 20 | .48 | | | | | |
| Statement 21 | .58 | | | | | |
| Statement 22 | .53 | | | | | |
| Statement 23 | .66 | | | | | |
| Statement 24 | .61 | | | | | |
| Statement 25 | .50 | .32 | | | | |
| Statement 26 | .57 | | .42 | | | |
| Statement 27 | .59 | | | | | |
| Statement 28 | .51 | | | | | |
| Statement 29 | .54 | | | | | |
| Statement 30 | .58 | | | | | |
| Statement 31 | .63 | | | | | |
| Statement 32 | .58 | | | | | |
| Statement 33 | .61 | .31 | | | | |
| Statement 34 | .56 | | | | | |
| Statement 35 | .61 | .34 | | | | |
| Statement 36 | .56 | .33 | | | | |
| Statement 37 | .53 | .31 | | | | |
| Statement 38 | .64 | | | | | |
| Statement 39 | .58 | | | | | |
| Statement 40 | .59 | .38 | | | | |
| Statement 41 | .60 | | | | | |
| Statement 42 | .64 | | | | | |
| Statement 43 | .46 | | | | | |

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Table 1 (continued)

Unrotated Factor Structure

| | F1 | F2 | F3 | F4 | F5 | F6 |
|---|---|---|---|---|---|---|
| Statement 44 | .61 | | | | | |
| Statement 45 | .52 | | | | | |
| Statement 46 | .51 | | | | | |
| Statement 47 | .58 | | | | | |
| Statement 48 | .62 | | | | | |
| Statement 49 | .54 | | | | | |
| Statement 50 | .54 | | | | | |
| Statement 51 | .57 | | | | | |
| Statement 52 | .57 | .34 | | | | |
| Statement 53 | .63 | | | | | |
| Statement 54 | .58 | | | | | |
| Statement 55 | .54 | | | | | |
| Statement 56 | .61 | | | | | |
| Statement 57 | .62 | | | | | |
| Statement 58 | .67 | | | | | |
| Statement 59 | .57 | | .39 | | | |
| Statement 60 | .56 | | | | | |
| Statement 61 | .64 | | | | | |
| Statement 62 | .62 | | | | | |
| Statement 63 | .43 | | | | | |
| Statement 64 | .59 | | | | | |
| Statement 65 | .56 | .35 | | | | |
| Statement 66 | .61 | | | | | |
| Statement 67 | .54 | | | | | |
| Statement 68 | .64 | | | | | |
| Statement 69 | .60 | | | | | |
| Statement 70 | .58 | | | | | |
| Common Variance | 61.2% | 14.6 | 8.2 | 6.4 | 5.3 | 4.3 |
| Total Variance | 31.4% | 7.5 | 4.2 | 3.3 | 2.7 | 2.2 |
| Eigenvalue | 21.95 | 5.25 | 2.97 | 2.30 | 1.91 | 1.56 |

Factors loadings less than .30 not reported.

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## Oblique Rotation of Factors

To simplify the factor loading pattern, six factors were rotated to an oblique solution using a direct oblimin criterion and the convention of a .30 loading as evidence that an item was related to a particular factor. The resulting factor pattern matrix is found in Table 2. Six factors are interpreted and discussed. The items meeting the .30 criterion for each factor or dimension, as well as a brief definition of each, are listed below.

Table 2

Factor Pattern Matrix

| | F1 | F2 | F3 | F4 | F5 | F6 | Communality |
|---|---|---|---|---|---|---|---|
| Statement 1 | | | | .54 | | | .42 |
| Statement 2 | | .73 | | | | | .55 |
| Statement 3 | | | .52 | | | | .40 |
| Statement 4 | | .47 | .33 | | | | .50 |
| Statement 5 | | .54 | | | | | .45 |
| Statement 6 | | | | .48 | | .36 | .44 |
| Statement 7 | | | | .44 | | | .44 |
| Statement 8 | | | | .59 | | | .48 |
| Statement 9 | | .30 | | | | .35 | .38 |
| Statement 10 | | | .66 | | | | .50 |
| Statement 11 | | | | | .55 | | .53 |
| Statement 12 | | | | | .52 | | .51 |
| Statement 13 | | | | | .55 | | .52 |
| Statement 14 | | | | .55 | | | .34 |
| Statement 15 | | .71 | | | | | .62 |
| Statement 16 | | | | | .43 | | .42 |
| Statement 17 | | | | | .40 | .34 | .49 |
| Statement 18 | | | .69 | | | | .53 |
| Statement 19 | | | .72 | | | | .55 |
| Statement 20 | | | | .56 | | | .42 |
| Statement 21 | | .83 | | | | | .67 |
| Statement 22 | | .64 | | | | | .58 |
| Statement 23 | | .49 | | | .30 | | .54 |
| Statement 24 | | .61 | | | | | .58 |
| Statement 25 | | | | | | .68 | .50 |
| Statement 26 | | | .69 | | | | .60 |
| Statement 27 | | .79 | | | | | .65 |
| Statement 28 | | | | .58 | | | .47 |
| Statement 29 | | | | .40 | | | .37 |
| Statement 30 | | | | | | .66 | .55 |
| Statement 31 | | | | | .33 | .37 | .54 |
| Statement 32 | | | | | | .36 | .40 |
| Statement 33 | | | | .31 | .38 | | .53 |
| Statement 34 | | | | | | .53 | .48 |
| Statement 35 | | | | | | .65 | .60 |
| Statement 36 | | | | .55 | | .31 | .57 |
| Statement 37 | | | | | | | .40 |
| Statement 38 | | .79 | | | | | .66 |
| Statement 39 | | | | | .32 | .43 | .46 |
| Statement 40 | | | | | | .54 | .56 |
| Statement 41 | | | | | | | .42 |
| Statement 42 | | .79 | | | | | .66 |
| Statement 43 | | | | | | .43 | .35 |

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Table 2 (continued)

Factor Pattern Matrix

| | F1 | F2 | F3 | F4 | F5 | F6 | Communality |
|---|---|---|---|---|---|---|---|
| Statement 44 | .42 | | | | | | .52 |
| Statement 45 | | | | | | .70 | .51 |
| Statement 46 | | .42 | | | | | .43 |
| Statement 47 | | .37 | | | | | .46 |
| Statement 48 | | .85 | | | | | .70 |
| Statement 49 | | | | .55 | | | .49 |
| Statement 50 | | | | .62 | | | .56 |
| Statement 51 | | | | | | .39 | .41 |
| Statement 52 | .39 | | | | | .42 | .53 |
| Statement 53 | .47 | | | | | | .55 |
| Statement 54 | | .36 | | | | | .49 |
| Statement 55 | .37 | | | .38 | | | .45 |
| Statement 56 | | .67 | | | | | .60 |
| Statement 57 | .44 | | | | | | .50 |
| Statement 58 | .40 | | | | | | .52 |
| Statement 59 | | | .61 | | | | .58 |
| Statement 60 | | | | .52 | | | .55 |
| Statement 61 | | .73 | | | | | .60 |
| Statement 62 | | .57 | | | | | .53 |
| Statement 63 | | | .56 | | | | .45 |
| Statement 64 | .43 | | | | | | .52 |
| Statement 65 | .34 | | | | | | .46 |
| Statement 66 | | .83 | | | | | .68 |
| Statement 67 | | | | | | .55 | .56 |
| Statement 68 | .47 | | | | | | .56 |
| Statement 69 | .40 | | | | | .49 | .56 |
| Statement 70 | .32 | | .43 | | | | .53 |

Factor loadings less than .30 not reported

F 1 = Generic
F 2 = Spiritualistic
F 3 = Integrative
F 4 = Musical-Artistic
F 5 = Self-Perception
F 6 = Communicative

Generic. Some of the statements that loaded highly on this factor (Factor 1 in the factor pattern matrix) related to effort and achievement (e.g. "To contribute to a group effort," "To be part of something good," "To feel the satisfaction of practicing long hours and getting results," etc.). Other ideas are also evident in certain statements under Factor 1. Some statements related to integration: "To enjoy being part of the sounds of many voices blending together," or "To be with chorus people." The notion of communication is evident in statements such as "To help other people enjoy music," "To have the excitement and thrill of presenting concerts," or "To have people hear the final product of a lot of hard work." The statements that loaded above the .30 criterion on this factor include:

| Statement | | Loading |
|---|---|---|
| 53. | To contribute to a group effort | .47 |
| 68. | To be part of something good | .47 |
| 57. | To feel the satisfaction of practicing long hours and getting results | .44 |
| 64. | To express a composer's words and thoughts contained in his music | .43 |
| 44. | To enjoy being part of the sounds of many voices blending together | .42 |
| 58. | To help other people enjoy music | .40 |
| 69. | To have the excitement and thrill of presenting concerts | .40 |
| 52. | To have people hear the final product of a lot of hard work | .39 |

| | |
|---|---|
| 55. To learn to sing parts other than the melody | .37 |
| 65. To learn to sing songs well | .34 |
| 70. To be with chorus people | .32 |

Spiritualistic. Statements that loaded highly on this factor (Factor 2 in the factor pattern matrix) reflected religious or spiritual meanings of the high school choral singing experience. Musical experiences may be viewed as an act of praise or evangelistic communication. Also related to this factor were some statements concerning self-perception and identity (Statements 4, 5, 46, and 47). The statements that loaded above the .30 criterion on this factor include:

| Statement | Loading |
|---|---|
| 43. To praise God for all his blessings | .85 |
| 66. To worship God through music | .83 |
| 27. To bring people to Christ | .79 |
| 38. To bring the joy of God to sad hearts | .79 |
| 2. To give people spiritual messages | .73 |
| 61. To share God's gift to me | .73 |
| 15. To fulfill God's gift to me | .71 |
| 56. To help make the world a better place to live in | .67 |
| 22. To convert people to a better way of life | .64 |

| | | |
|---|---|---|
| 24. | To help me be at peace with myself | .61 |
| 62. | To help me get to know myself better | .57 |
| 5. | To give others a message through my singing | .54 |
| 4. | To find out who I am | .47 |
| 46. | To help make life go by easier | .42 |
| 47. | To feel more at ease | .37 |
| 54. | To understand why other people love music | .36 |
| 9. | To show off the potential God gave me | .30 |

Integrative. Statements that loaded highly on this factor (Factor 3 in the factor pattern matrix) characterized the meaningfulness of choral singing experience in terms of participating in and interacting with the group. Satisfying experiences in choral music require cooperation and integration of the group. For some students the social aspects of their participation were most meaningful. The statements that loaded above the .30 criterion on this factor include:

| Statement | | Loading |
|---|---|---|
| 19. | To be with a great group of people | .72 |
| 18. | To meet new people | .69 |
| 26. | To make and enjoy good friends | .69 |
| 10. | To learn to get along with other people | .66 |
| 59. | To be part of a very close group of friends | .61 |

| | |
|---|---|
| 63. To have a good time with the rest of the group | .56 |
| 3. To work with other people | .52 |
| 70. To be with chorus people | .43 |
| 4. To find out who I am | .33 |

Musical-Artistic. Statements that loaded highly on this factor (Factor 4 in the factor pattern mix) concerned the drawing in of musical knowledge and the acquisition of musical skill. The meaning of high school choral singing experience may be viewed as inherent in the music itself. Musical activities provide a means of heightening one's perception of musical phenomena and developing musicianship. The statements that loaded above .30 criterion on this factor include:

| Statement | Loading |
|---|---|
| 50. To discover styles and patterns in music | .62 |
| 8. To learn how to control my voice | .59 |
| 28. To learn to appreciate all kinds of music | .58 |
| 20. To train my ear | .56 |
| 14. To learn how to read music | .55 |
| 36. To develop my musical talent | .55 |
| 49. To experience musical art | .55 |
| 1. To enrich my musical knowledge | .54 |

| | | |
|---|---|---|
| 60. | To learn to appreciate the arts | .52 |
| 6. | To prepare for a musical career | .48 |
| 7. | To sing many different kinds of music | .44 |
| 29. | To develop my self-discipline | .40 |
| 55. | To learn to sing parts other than the melody | .38 |
| 33. | To try, succeed, and get better | .31 |

Self-Perception. Statements that loaded highly on this factor (Factor 5 in the factor pattern matrix) concerned the fulfillment of a need for achievement, as well as the notion that choral singing is meaningful in a private, individualstic, existentialist way. Choral experience may provide a way of determining one's own identity and determining individual strengths and limitations. The statements that loaded above the .30 criterion on this factor include:

| Statement | | Loading |
|---|---|---|
| 11. | To get a sense of accomplishment | .55 |
| 13. | To please people with our singing | .55 |
| 12. | To give me a good feeling inside | .52 |
| 16. | To relax and forget my problems for awhile | .43 |
| 17. | To sing well for others | .40 |
| 33. | To try, succeed, and get better | .38 |
| 31. | To share my talent with others | .33 |

| | |
|---|---|
| 39. To feel a sense of pride | .32 |
| 23. To have an experience full of feeling | .30 |

Communicative. Statements that loaded highly on this factor (Factor 6 in the factor pattern matrix) primarily involved reaching out to others. These statements concerned the expression of feelings and ideas to an audience. The statements that loaded above the .30 criterion on this factor include:

| Statement | Loading |
|---|---|
| 45. To have others listen to me | .70 |
| 25. To get out in front of a crowd and sing | .68 |
| 30. To communicate so well with an audience that they applaud | .66 |
| 35. To perform for others | .65 |
| 67. To see the faces of the audience when we give a concert | .55 |
| 40. To present good concerts | .54 |
| 34. To associate with talented people | .53 |
| 69. To have the excitement and thrill of presenting concerts | .49 |
| 43. To find out if I have some singing ability | .43 |
| 39. To feel a sense of pride | .43 |
| 52. To have other people hear the product of a lot of hard work | .42 |

| | | |
|---|---|---|
| 51. | To feel rewarded | .39 |
| 31. | To share my talent with others | .37 |
| 32. | To hear others around me perform | .36 |
| 6. | To prepare for a musical career | .36 |
| 9. | To show off the potential God gave me | .35 |
| 17. | To sing well for others | .34 |
| 36. | To develop my musical talent | .31 |

## Intercorrelations Among Factors

Although the oblique factor pattern matrix clearly delineates six underlying dimensions or factors, the interrelationships among the dimensions suggest a considerable departure from orthogonality. Nine of the fifteen correlations were positive and moderate in size (ranging from .17 to .33), except for the relationships between the spiritualistic factor and every other dimension (these correlations ranged from -.39 to -.15) and the relationship between the integrative and communicative dimensions (-.31).

Table 3

Factor Intercorrelation

| | F1 | F2 | F3 | F4 | F5 | F6 |
|---|---|---|---|---|---|---|
| Factor 1 | 1.00 | | | | | |
| Factor 2 | -.15 | 1.00 | | | | |
| Factor 3 | .26 | -.39 | 1.00 | | | |
| Factor 4 | .26 | -.30 | .21 | 1.00 | | |
| Factor 5 | .17 | -.23 | .23 | .26 | 1.00 | |
| Factor 6 | .30 | -.32 | -.31 | .33 | .26 | 1.00 |

Factor 1 = Generic
Factor 2 = Spiritualistic
Factor 3 = Integrative
Factor 4 = Musical-Artistic
Factor 5 = Self-Perception
Factor 6 = Communicative

## Discussion

The results of this investigation substantiate the findings of the 1981 study. The meaning of high school choral singing for student participants is a multidimensional construct. This was true for Pennsylvania public high school students in the earlier study, as well as for Missouri parochial school students in the more recent investigation.

In both investigations, the unrotated factor structure revealed a single generic factor, which included every statement from the survey. The underlying dimensions in the 1983 data are quite similar to those found in the 1981 study:

| 1981 Dimensions | 1983 Dimensions |
|---|---|
| Achievement | Generic |
| Spiritualistic | Spiritualistic |
| Musical-Artistic | Integrative |
| Communicative | Musical-Artistic |
| Psychological | Self-Perception |
| Integrative | Communicative |

The Psychological factor in the 1981 study is similar to the Self-Perception factor in the 1983 investigation. In 1983 a generic dimension in the oblique rotation solution replaced the 1981 Achievement factor.

The structure of the factor pattern matrix in the 1983 study is considerably more complex than that of the 1981 investigation. More of the statements relate strongly to two factors, which to some extent clouds the interpretability of the structure.

Although six factors were clearly differentiated in the oblique rotation factor solution, the interrelatedness of the dimensions suggests the presence of a more global dimension of meaningfulness, subsuming all of the variables. This notion is substantiated further by the high loadings of the variables on the first unrotated factor, accounting for 62.2% of the common variance.

The results of the study substantiate the view that there are multiple outcomes of music education experiences for participants. Music programs have traditionally been evaluated primarily on the basis of musical knowledge or skills developed by students as a result of instruction. The results of this study tend to confirm the power of music to enhance students' affective development.

Further investigation into the meaning of high school choral singing experience would appear to be merited. As was the case in 1981, student participants in this study viewed the meaning of high school choral singing as a multifaceted phenomenon. The results of the present study support the view that high school choral singing experience produces multiple outcomes for participants.

## References

Farrell, P. (1972). The meaning of the recreation expreience in music as it is defined by urban adults who determined typal singer profiles through Q-technique. (Doctoral dissertation, the Pennsylvania State University, 1972). Dissertation Abstracts International, 33, 6949A-6950A. (University Microfilms No. 73-13, 973)

Harman, H.H. (1968). *Modern factor analysis*. Chicago: University of Chicago Press.

Hylton, J. 91981). Dimensionality in high school participants' perceptions of the meaning of choral singing experience. Journal of Research in Music Education, 29, 287-303.

Knieter, G.L. The nature of aesthetic education. Toward an asethetic education. Washington, D.C.: Music Educators National Conference, 1971.

Leonhard, C., & House, R.W. (1972). Foundations and principles of music education (2nd ed.). New York: McGraw-Hill Book Company.

Reimer, B. (1970). A philosophy of music education. Englewood Cliffs, NJ: Prentice-Hall.

# A STUDY TO ASCERTAIN THE COMMONLY PREFERRED ELEMENTS IN A BRASS WARM-UP ROUTINE*

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No magic formula exists to develop a brass player's technique. A brass player must master embouchure, breathing, articulation and fingering (MEJ). With the demands for endurance, range, lip flexibility, and finger and tongue dexterities, a brass player must strive to perfect and maintain fundamental skills.

Methods employed to help student develop concepts of these basic skills vary considerably (MEJ). The single most important fractor in the development and maintenance of these skills is a daily routine. This routine is generally referred to as the warm-up. Carl "Doc" Severinsen stated, "I believe and feel it is most usually accepted that a 'warm-up', properly done, is the 'correct' way to approach improved brass playing (Severinson).

A carefully designed routine is essential for the development of good playing habits which will lead to greater embouchure stability and general consistency in playing ability (Autrey). All brass players need a daily routine which incorporates the ingredients of the basic playing skills and techniques.

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## Background of the Problem

Organizations such as marching bands, concert band, orchestra, jazz band, brass choir and small ensembles require brass players to prepare physically and mentally for each performance and small ensembles require brass players to prepare physically and mentally for each performance and practice session. Directors of these ensembles are aware of the need for brass players to warm-up prior to each rehearsal but many times overlook the opportunity to promote and strengthen the development of each individual's physical and mental skills.

## Review of Related Literature

No published research concerning the commonly preferred elements in a brass warm-up routine was found. Several authors do, however, discuss the importance of such a routine and point out that the development of a brass player's physical and mental skills should not be left to chance. A successful routine should be designed for the cultivation, maintenance and improvement of the basic playing skills (Autrey).

"The first and most important requisite to anyone who plays a brass instrument isa strong lip or 'embouchure'" (Goldman). A good embouchure provides the foundation on which to develop tone quality, range, articulation, dynamic control and endurance. Herbert L. Clarke stated that "endurance is the prize for practicing regularly and correctly" (Colwell).

Since a brass instrument is also a wind instrument, "mastery of our breathing is a prerequisite for successful brass playing" (Colin). When we think of breathing, we can simply describe the process as inhaling and exhaling. Once we have mastered the concepts of inhaling and exhaling, the next step is to learn to control certain techniques, such as air flow and lung capacity, as they relate to musical performance.

Charles Colin believes that "Breath control is the result of a support chain. Reliance on this support chain is essential if we are to succeed in diverting the burden of brass playing from our lips to our body" (Colin). This "support chain" constitutes the complete anatomical process of breathing as it is utilized in performance on a brass instrument.

A brass player with comprehensive knowledge of fundamental embouchure and breathing procedures will be prepared to concentrate on advanced techniques.

Manny Brand asserts that:

> The most basic procedure for all performance ensembles is the warm-up. Unfortunately, some warm-ups fail to become a productive musical teaching experience for many directors and their students. This may be because little is really know about what constitutes a good warm-up. (Brand)

Russell Pizer offers the following:

> A band cannot become successful just by playing band music and more band music. It is an absolute necessity that the program constantly continue the development of the individual's instrumental techniques--his facility to manipulate his instrument in all ways called for by the music the band desires to perform today and in the future. (Pizer)

## Statement of the Problem

The purpose of this study was to ascertain what materials are currently being used in developing and designing a warm-up routine for brass players and to discover what college/university brass teachers in Missouri consider to be the greatest needs for high school brass players.

The following questions were addressed:

1. What method books are recommended?

2. What type of warm-up procedure should be used?

3. Should brass players have a definite practice routine?

4. What are the common strengths and weaknesses of high school brass players?

## Procedure

The method for developing this thesis is descriptive research. The means of acquiring information was a survey. A survey instrument and a letter of transmittal, designed by the author and his thesis committee, was pretested in a pilot study.

Upon completion of the pilot study, the revised survey materials were sent to the following Missouri schools: Central Methodist College, Central Missouri State University, Culver-Stockton College, Drury College, Evangel College, Hannibal-LeGrange College, Lincoln University, Maryville College, Missouri Southern State College, The University of Missouri-Columbia, University of Missouri-Rolla, University of Missouri-Kansas City, Northeast

Missouri State University, Northwest Missouri State University, The School of the Ozarks, Park College, St. Louis Conservatory of Music, St. Louis University, Southeast Missouri State University, Southwest Baptist College, Southwest Missouri State University, Webster College, and William Jewell College.

## Delimitations

This study surveyed brass instructors in colleges/universities in Missouri as listed in the *College Music Society Directory of Music Faculties in Colleges and University, U.S. and Canada 1982-84*.

## Definition of Terms

In this thesis the following terms are used with their corresponding definitions:

1. Brass player refers to a musician playing an instrument of the brass family (trumpet/cornet, horn, trombone, baritone/-euphonium, sousaphone/tuba).

2. Technique is used in reference to the skill one attains on his/her instrument.

3. Embouchure is the formation of the lips and facial muscles upon contact with the mouthpiece.

4. Breathing refers to the process of intaking and expelling air.

5. Articulation is the technique(s) utilized in the beginning of each note.

6. Finger dexterity relates to the mechanics of depressing valves or moving slides.

7. Tongue dexterity is the ability to control movement of the tongue.

8. Endurance is the stamina to play for extended periods of time.

9. Range refers to the pitches a brass player can play with reasonable accuracy.

10. Lip flexibility refers to the contraction and relation of the lip and facial muscles.

11. Warm-up is a daily routine comprised of exercises which incorporate the use of the basic performance skills.

## Hypotheses

Interest in developing a successful high school brass section leads to the author's research hypotheses:

Declarative hypothesis, $H_1$: Brass teachers in the institutions of higher learning in Missouri will indicate commonly preferred ingredients in a brass warm-up routine.

Null hypothesis, $H_0$: Brass teachers in the institutions of higher learning in Missouri will indicate no commonly preferred ingredients in a brass warm-up routine.

## Results of the Survey

Survey materials were sent to fifty-three brass instructors in twenty-three institutions of higher learning in Missouri. Seventy-four percent of the institutions surveyed were represented in a questionnaire response of sixty-four percent. Many of the brass instructors teach more than one applied instrument but were requested to respond to their applied area(s) of expertise. Table 1 lists the number of responses received in each instrumental category. Three respondents were either no longer teaching in Missouri or no longer teaching brass and therefore their responses were not included.

Table 1

Applied Teaching Area(s)

| Instrument | Number of Responses |
|---|---|
| trumpet | 12 |
| horn | 12 |
| trombone | 12 |
| euphonium/tuba | 8 |

Survey questions have been grouped according to areas such as routine and length, warm-up process, teaching techniques, element

Survey questions have been grouped according to areas such as routine and length, warm-up process, teaching techniques, element rankings, opinions and method books. Responses to the questionnaire are found in Tables 2 through 11.

Ninety-three percent of the respondents prescribe a warm-up routine for their students. Several teachers commented that a warm-up is a personal routine that should be based on the individual's strengths and weaknesses, with the length of a warm-up routine dependent upon the individual, varying from a few minutes to an hour. The average recommended length of a brass warm-up routine is twenty minutes. Table 2 lists the average recommended lengths by instrument.

Table 2

Routine Length

| Survey Question | Responses | |
|---|---|---|
| | Instrument | Minutes |
| How long should a warm-up take? | trumpet | 25 min. |
| | horn | 19 min. |
| | trombone | 20 min. |
| | euphonium/tuba | 17.5 min. |

Responses to specific items such as mouthpiece buzzing, register, dynamic levels, long-tone playing and lip flexibility are recorded in Tables 3 through 7. Respondents advocating mouthpiece buzzing during the warm-up suggest that approximately two minutes should be devoted to this portion of the routine. Opponents to mouthpiece buzzing indicate that they sometimes have students buzz on the mouthpiece to correct an embouchure or tone production problem, but not as a daily technique to be included in the warm-up routine. Most resondents felt that the warm-up should be in in the middle register starting at a mezzo-forte dynamic level.

Ninety-eight percent of the respondents indicate that long-tone playing and lip flexibility exercises are extremely important elements to be utilized during the warm-up process. Given a total warm-up time of twenty minutes, the average amount of time a brass player should spend on mouthpiece buzzing, long-tones and lip flexibility is two minutes, four minutes and six and one-half minutes, respectively.

Table 3

Warm-Up Process (Buzzing)

| Survey Question | Responses | | | | |
|---|---|---|---|---|---|
| | | TPT | HN | TBN | EU/TB |
| Do you recommend mouthpiece buzzing during the warm-up process? | yes | 58% | 42% | 67% | 50% |
| | no | 33% | 58% | 33% | 50% |
| | sometimes | 8% | --- | --- | --- |
| | If yes, what percentage of the total warm-up time? | | | | |
| | | 6.8% | 15.7% | 8.7% | 7.5% |

The techniques and methods of teaching utilized by the participants are listed in Table 8. Summaries of responses to breathing techniques, extended range development and endurance are as follows:

1. Proper breathing technique include the ability to take deep breaths while remaining as relaxed as possible. A sensation of abdominal expansion should occur if breathing properly.

2. In order to develop extended ranges, the importance of breath support and proper embouchure cannot be stressed enough. Once the concepts of breathing and embouchure formation have been mastered, the development of range can be acquired through the use of scales and arpeggios.

3. To have the power and stamina required of brass players, the student must learn to pace

Table 4

**Warm-Up Process (Registers)**

| Survey Question | Responses | | | | |
|---|---|---|---|---|---|
| | | TPT | HN | TBN | EU/TB |
| In what register should the warm-up begin? | low | --- | 8% | --- | --- |
| | middle | 100% | 92% | 100% | 87.5% |
| | high | --- | --- | --- | --- |
| | combination | --- | --- | --- | 12.5% |

Table 5

**Warm-Up Process (Dynamics)**

| Survey Question | Responses | | | | |
|---|---|---|---|---|---|
| | | TPT | HN | TBN | EU/TB |
| At what dynamic level(s) should the warm-up begin? List in order of sequence. | pp | 5 | 6 | 6 | 6 |
| | p | 4 | 4 | 4 | 4 |
| | mp | 2 | 2 | 2 | 2 |
| | mf | 1 | 1 | 1 | 1 |
| | f | 3 | 3 | 3 | 3 |
| | ff | 6 | 5 | 5 | 5 |

Table 6

Warm-Up Process
(Long Tones)

| Survey Question | Responses | | | | |
|---|---|---|---|---|---|
| | | TPT | HN | TBN | EU/TB |
| Should any long-tone playing be done as part of the warm-up? | yes | 92% | 100% | 100% | 100% |
| | no | 8% | --- | --- | --- |
| | If yes, what percentage of the total warm-up time? | | | | |
| | | 22% | 22.5% | 17.9% | 21.4% |

Table 7

Warm-Up Process
(Lip Flexibility)

| Survey Question | Responses | | | | |
|---|---|---|---|---|---|
| | | TPT | HN | TBN | EU/TB |
| Should time be devoted to lip flexibility during the warm-up period? | yes | 92% | 100% | 100% | 100% |
| | no | 8% | --- | --- | --- |
| | If yes, what percentage of the total warm-up time? | | | | |
| | | 27% | 37% | 32% | 36% |

himself/herself. Through the use of proper warm-ups and a daily routine, a brass player will eventually build endurance.

Table 8

Teaching Techniques

| Survey Question | Responses |
|---|---|
| What breathing techniques do you stress? | large, deep and relaxed breaths<br>abdominal expansion<br>diaphragm support |
| What do you suggest a student do to develop extended ranges? | scales and arpeggios<br>practice extended ranges |
| What do you suggest a student do for increasing endurance? | daily practice routine<br>long-tones |

All of the elements in a warm-up routine are important. Certain elements may be more important than others depending upon the varying needs of the individual. Missouri brass teachers were asked to rank fourteen elements of a brass warm-up routine in the order of importance. Results of the element rankings are listed in Table 9.

Table 9

Element Rankings

| Survey Question | Responses | | | | |
|---|---|---|---|---|---|
| | Elements | TPT | HN | TBN | EU/TB |
| In what order of importance would you rank the following elements of a warm-up? | relaxation | 2 | 1 | 3 | 3* |
| | long-tones | 4 | 2 | 1 | 1 |
| | slow legato playing | 8 | 8* | 8 | 8* |
| | lip slurs | 1 | 4 | 4 | 3* |
| | flexibility | 3 | 3 | 2 | 2 |
| | expanding arpeggios | 7 | 6 | 7 | 7 |
| | intervals | 11 | 10 | 11 | 8* |
| | controlled dynamics | 9 | 7 | 9 | 10 |
| | scales | 6 | 5 | 5 | 5 |
| | staccato | 14 | 11 | 12 | 13 |
| | pedal tones | 13 | 14 | 13 | 11 |
| | breathing exercises | 5 | 8* | 6 | 6 |
| | mouthpiece buzzing | 12 | 12 | 11 | 12 |
| | short-tones/attacks | 10 | 13 | 14 | 14 |

*indicates a tie in the ranking

The responses to the questions listed in Table 10 address the strengths and weaknesses that exist in today's brass playing and teaching. Respondents seem to be indicating that tone quality, intonation, musical expression and basic musicianship should and need to be stressed as much as the development of technique. Supporting statements suggest that many high school brass players possess pyro-technical skills and are capable of playing high and loud. Respondents also express an attitude that today's young brass players are more advanced than previous generations. Today's serious high school brass student has more opportunities to purchase recordings, attend concerts and study with fine teachers.

Table 10

Opinions

| Survey Question | Responses |
|---|---|
| If you were to make a critical analysis of today's brass teaching, what in your opinion are the most apparent weaknesses in pedagogy? | breathing techniques<br>tone production<br>concepts of sound |
| What in your opinion is a most obvious strength of present-day high school brass players? | technique<br>range |

In the questions pertaining to method books, the participants were asked to recommend books for warm-ups and a course of study applicable to the serious high school brass student. The books mentioned most frequently are presented in Table 11.

Table 11

Method Books

| Survey Question | | Response |
|---|---|---|
| What method book(s) do you suggest a student use for warm-ups? | | |
| Trumpet | | |
| *100% | Clarke | Technical Studies |
| 92% | Schlossberg | Daily Drills/Technical Studies |
| 75% | Arban | Complete Celebrated Method |
| 42% | Irons | 27 Groups of Exercises |
| 25% | Smith | Lip Flexibility on the Trumpet |
| 25% | Ligotti | Daily Trumpet Exercises |
| 25% | Williams | The Secret of Technique Preservation |
| Horn | | |
| 75% | Farkas | The Art of French Horn Playing |
| 58% | Singer | Embouchure Building |
| 33% | Clarke | Technical Studies |
| 25% | Little | Embouchure Builder |
| Trombone | | |
| 92% | Remington | Warm-up Exercises |
| 50% | Schlossberg | Daily Drills/Technical Studies |
| 42% | Marsteller | Basic Routines |
| Euphonium | | |
| 75% | Remington | Warm-up Exercises |
| Tuba | | |
| 63% | Remington | Warm-up Exercises |
| 50% | Rochut | Melodious Etudes |

* Percentages indicate the number of respondents selecting this method

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Table 11 (continued)

**Method Books**

| Survey Question | | Response |
|---|---|---|
| In a course of study, what method book(s) do you suggest a serious high school student use? | | |
| Trumpet | | |
| 92% | Arban | Complete Celebrated Method |
| 60% | Clarke | Technical Studies |
| 50% | Schlossberg | Daily Drills/Technical Studies |
| Horn | | |
| 83% | Pottag | Preparatory Melodies to Solo Work |
| 83% | Pottag | 335 Selected Studies |
| 67% | Kopprasch | 60 Selected Studies |
| 58% | Maxime-Alphonse | 200 Modern French Horn Etudes |
| Trombone | | |
| 75% | Rochut | Melodious Etudes |
| 67% | Arban/Prescott | First and Second Year |
| 42% | Gower/Voxman | Rubank, Elementary-Advanced |
| 42% | Fink | Studies in Legato |
| Euphonium | | |
| 50% | Rochut | Melodious Etudes |
| 38% | Arban | Complete Celebrated Method |
| 38% | Gower/Voxman | Rubank, Elementary-Advanced |
| Tuba | | |
| 38% | Tyrell | 40 Progressive Studies |
| 25% | Arban/Prescott | First and Second Year |

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## Twenty-Minute Routine

Learning to play an instrument demands individual and structured practice. The goal of a warm-up routine is to prepare an individual physically and mentally for a rehearsal or performance. Although there are a number of possibilities in designing a successful daily routine, the survey results suggest that a routine should take twenty minutes and consist of ingredients common to all brass players.

Depending upon the needs of the individual, one element may be stressed and require more time at the expense of other elements. This does not mean an individual should ignore or discard the importance of the other elements. All of the exercises used in a warm-up routine should bein in the middle register at a mezzoforte dynamic level. As the individual progresses through the routine, he/she should expand the range and dynamic levels. Care should be taken to avoid fatigue by resting often between exercises.

The fourteen elements of an ideal brass warm-up routine, as suggested by the pilot study, can be consolidated into seven categories: relaxation period, lip slurs, scales, long-tones, intervals, slow legato playing, and pedal tones. Utilizing the supporting comments of the survey respondents, these seven categories can be described as follows.

The relaxation period could consist of breathing exercises and mouthpiece buzzing. Lip slurs should be practiced slowly to develop proper tongue level technique while flexibility exercises are a continuation of lip slurs played with increased speed. Practicing scales in various forms aids in the development of technique. Tonguing styles such as staccato, legato and a mixture of the two should be incorporated when practicing scales. For technique expansion, strive for velocity and facility with accuracy. Long-tones should be a continuation of the relaxation period. Long-tone playing, short-tone attacks and releases should incorporate the use of controlled dynamics. Interval work and expanding arpeggios may be combined with practicing scales. Slow legato playing provides an opportunity for the individual to pay attention to all aspect of playing, particularly to lyrical and melodic concepts, both of which were mentioned as a weakness in today's brass pedagogy. It has been suggested that the use of pedal tones is a form of relaxation which can also serve as a "warm-down."

## Conclusions

Responses to the questionnaire indicate a positive attitude toward the benefits of a daily routine. The use of a daily warm-up routine can form the foundation upon which one develops and maintains basic playing skills. By introducing and constantly reviewing specific concepts, progress will be assured.

## Rejection of Hypothesis

Through observation and analysis of the survey results, the null hypothesis may be rejected. The null hypothesis stated: "Brass teachers in the institutions of higher learning in Missouri will indicate no commonly preferred ingredients in a brass warm-up routine." Opinions expressed by respondents are indicative of the declarative hypothesis. There are commonly preferred elements which comprise a brass warm-up routine.

## Recommendations for Further Research

A comparative study, an in-depth investigation of a national scope, relating information to a particular brass instrument or instruments would be most beneficial. How do the findings of the present study compare to the opinions and pedagogical techniques of other brass teachers across the country?

Woodwind players and percussionists were omitted from this study. A follow-up investigation might be conducted to ascertain information relevant to other instruments.

A better understanding of how the elements of a warm-up routine are being applied in the form of exercises might be gained through careful and detailed examination of various pedagogical materials and method books. The findings of this type of examination might lead to an interest in researching band warm-up method books.

The final recommendation would be to apply the techniques of experimental research to the findings of this project. Could the benefits of a warm-up routine be measured if applied to the teaching methods of instrumental music teachers?

Possibly the information revealed in this project will encourage music teachers to evaluate their teaching methods and provide them with the information necessary to develop successful daily routines for students. If this happens, then a further contribution has been made toward the development of improved young brass players.

## References

Autry, B. (1963). Basic guide to trumpet playing. Chicago: M. M. Cole Publishing Co.

Bollinger, D. (1979). Band directors complete handbook. West Nyack, NY: Parker.

Brown, F. (1979). A band director's handbook of problems and solutions in teaching instrumental music. Lebanon, IN: Studio P/R.

Brown, M. (1981). Teaching the successful high school brass section. West Nyack, NY: Parker.

Butts, C. (1978). The high school band clinic. West Nyack, NY: Parker.

__________. (1981). Troubleshooting the high school band. West Nyack, NY: Parker.

Colin, C. (1972). The brass player. New York: Colin.

Colwell, R.J. (1969). The teaching of instrumental music. New York: Meredith Corp.

Dale, D. (1965). Trumpet technique. London: Oxford University Press.

Farkas, P. (1962). The art of brass playing. Bloomington, IN: Brass Publications.

__________. (1956). The art of French horn playing. Evanston, IL: Summy-Birchard Pub. Co.

Fink, R.H. (1977). The trombonist's handbook. Athens, OH: Accura Music.

Fox, F. (1976). *Essentials of brass playing*. Pittsburgh: Volkwein Bros.

Gibson, D. (1967). *A textbook for trumpet*. Minneapolis: Schmitt Music Centers.

Haynie, J. (n.d.). *Development and maintenance techniques for all brass instruments in treble clef*. New York: Colin.

Hunt, N.J. (1968). *Guide to teaching brass*. Dubuque, IA: William C. Brown.

Kleinhammer, E. (1963). *The art of trombone playing*. Evanston, IL: Summy-Birchard Pub. Co.

Knaub, D. (1964). *Trombone teaching techniques*. Fairport, NY: Rochester Music Publications.

Lafosse, A. (1955). *Treatise on teaching the slide trombone*. Paris, France: Leduc.

Mason, J.K. (1977). *The tuba handbook*. Toronto, Canada: The Cumberland Press.

Mendez, R. (1961). *Prelude to brass playing*. New York: Carl Fischer.

Moore, E.C. (1964). *The brass book*. Kenosha, WI: Leblanc Pub.

Mueller, H.C. (1968). *Learning to teach through playing, a brass method*. Reading, MA: Addison-Wesley.

Noble, C. (1964). *The psychology of cornet and trumpet playing*. Missoula, MT: The Mountain Press.

Pegram, W. (1973). *Practical guidelines for developing the high school band*. West Nyack, NY: Parker.

Pizer, R.A. (1976). How to improve the high school band sound. West Nyack, NY: Parker.

Porter, M. (1967). The embouchure. London: Boosey and Hawkes.

Powell, R. (1981). Guide to trombone instruction. Richard E. Powell.

Ridgeon, J. (1976). How brass players do it. Melville, NY: Belwin Mills.

Schuller, G. (1962). Horn technique. London: Oxford University Press.

Sherman, R. (1979). The trumpeter's handbook. Athens, OH: Accura Music.

Weast, R. (1961). Brass performance an analytical text. New York: McGinnis and Marx Pub.

Weerts, R. (1969). Developing individual skills for the high school band. West Nyack, NY: Parker.

Weisberg, A. (1975). The art of wind playing. New York: Schirmer Pub.

Wick, D. (1971). Trombone technique. New York: Oxford Press.

Winter, J. (1964). The brass instruments. Boston: Allyn and Bacon, Inc.

Zorn, J.D. (1977). Brass ensemble method for music educators. Belmont, CA: Wadsworth.

## Periodicals

Allgood, W. (1983). The why, when, where, what and how of practicing. The Instrumentalist, 38(2), 32-34, 37.

Bradle, S. (1982). Carole Reinhart--solo trumpeter supreme. The Instrumentalist, 37(4), 34-39.

Brand, M. (1981). The warm-up, prelude to a meaningful rehearsal. The School Musician, 53(2), 22-23.

Everett, T. (1984). Get ready, get set, warm-up. The Instrumentalist, 38(10), 40-41.

Gardner, J. (1983). Musical warm-ups for band. The Instrumentalist, 38(3), 100, 102.

Getting down to brass facts: a roundtable. (1979). Music Educators Journal, 66(1), 40-49, 76-77.

Johnson, K. (1983). Basic skills for young trumpet players. The School Musician, 54(10), 12-13.

Jolly, T. & VanderArk, S. (1984). Mouthpiece buzzing for low brass. The Instrumentalist, 38(10), 36.

Severinsen, C. (1967). Why warm-up? The School Musician, 39, 68-69.

## Papers/Surveys

Autry, B. Papers, Michigan State University, East Lansing.

Bellamah, J.L. (1978). A survey of modern brass teaching philosophies. San Antonio, TX: Southern Music. Co.

## Theses

Bauche, K.D. (1982). A questionnaire response study of teacher training courses related to the jazz ensemble in secondary school music programs, *Master Thesis*, University of Louisville, KY.

Kirk, P.J. (1976). The orchestral tuba player: the demands of his literature compared and contrasted with tuba training materials. *Unpublished Doctoral Thesis*, University of Colorado, Boulder.

## Method Books

Arban, J.B. (1936). *Arban's complete conservatory method for trumpet*. Edited by Edwin Franko Goldman and Walter J. Smith. New York: Fischer.

Bellamah, J. (1965). *44 melodious warm-up exercises for trumpet*. San Antonio, TX: Southern Music Co.

Brisbois, B. (1964). *Trumpet today*. Hollywood, CA: Highland Music Co.

Callet, J. (1973). *Trumpet yoga*. New York: Colin.

Caruso, C. (1979). *Music calisthenics for brass*. Hollywood, CA: Almo Publications.

Fink, R.H. (1969). *Studies in legato for trombone*. New York: Fischer.

_________. (1968). *Introducing the tenor clef*. Athens, OH: Accura.

Goldman, E.F. (1979). *Daily embouchure studies*. New York: Fischer.

Gordon, C. (1978). Physical approach to elementary brass playing. New York: Fischer.

________. (1968). Systematic approach to daily practice. New York: Fischer.

Gower, W. & Voxman, H. (1965). Advanced method for cornet and trumpet: Vol. I and II. Miami, FL: Rubank, Inc.

Hering, S. (1943). 32 etudes for trumpet or cornet. New York: Fischer.

Irons, E. (1966). 27 groups of exercises. San Antonio, TX: Southern Music Co.

Kopprasch, C. (1939). Sixty selected studies. New York: Fischer, 1939.

Lane, G.B. (1970). Concise daily routine for trombone. Nashville: The Brass Press.

Ligotti, A. (n.d.). Daily trumpt exercises. Dallas: Jeffco Music Pub.

Little, L. (1954). Embouchure builder for trumpet, horn, trombone and tuba. Westbury, Long Island: Pro Art.

Macbeth, C. (1968). The original Louis Maggio System for brass. North Hollywood, CA: Maggio Music Press.

Marsteller, R.L. (1974). Basic routines for trombone. San Antonio, TX: Southern Music Co.

Maxime-Alphonse (1925). Two hundred new melodic and gradual studies for horn. Paris: Leduc.

McDunn, M. & Barnes, C. (1965). Trombone artistry. Kenosha, WI: Leblanc.

Moeck, W. (1976). Trombone warm-ups. Oskaloosa: C.L. Barnhouse.

Pottag, M.P. (1941). Preparatory melodies to solo work for French horn. New York: Belwin.

__________. (1949). 335 selected studies for horn. San Antonio, TX: Southern Music Co.

Remington. (1980). The Remington warm-up studies. Edited by Donald Hunsberger. Athens, OH: Accura.

Rochut. (1928). Melodious etudes for trombone. New York: Fischer.

Ronka, I. (1976). Modern daily warm-ups and drills for trombone, baritone, or tuba. New York: Fischer.

Sawyer, J.F. (1972). Concone lyrical studies for trumpet or horn. Nashville: The Brass Press.

Schlossberg, M. (1959). Daily drills and technical studies for trumpet. New York: M. Baron.

Shoemaker, J.R. (1973). Legato etudes for trumpet. Macomb, IL: Dean Pub. Co.

Singer. (n.d.). Embouchure building. New York: Belwin.

Slokar, B. (1979). Warm-ups and technical studies for trombone. Nashville: The Brass Press.

Smith, W.M. (1935). Lip flexibility on the cornet or trumpet. New York: Fischer.

Stamps, J. (1978). *Warm-ups and studies for trumpet*. Switzerland: BIM Editions.

Tyrell. (1948). *40 progressive studies for tuba*. London: Boosey and Hawkes.

# DISCRIMINATION AND CONSISTENCY OF JUDGMENT OF MUSICAL BALANCE OF WIND QUARTETS: AN EXPLORATORY STUDY

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Listening skills of many kinds are crucial to the conductor's success in developing a quality performing ensemble. These skills include pitch and rhythm error detection, detection of faulty intonation, detection of incorrect or varying tempos, and detection of problems of ensemble balance. Certain of these skills have received research attention. Pitch and rhythm error detection, for instance, has been investigated in many studies (Collings, 1973; Gonzo, 1969; Grunow, 1980; Hansen, 1961; Liles, 1978; Michels, 1972; Ramsey, 1978; Shaw, 1971; Sidnell, 1968, 1971; Wyatt, 1974). Studies have also been done regarding preference and/or discrimination of intonation, as well as memory and preferences for tempo (Geringer, 1976; Sorenson, 1974; Wapnick, 1980). While discrimination of balance receives much emphasis in books and articles describing rehearsal techniques and the desirable attributes of prospective conductors, it has not received attention from researchers.

Balance has been aptly described as,

> . . . that condition in which the contribution to the total effect of each of the voices sounding at a given time is not obscured by the other voices. Considerations of balance would be involved in the clarity of the melodic line, in the equalization of amplitude of the various

> voices, and in the overall texture of a composition at any given place. (Pontius, 1982, p. 7)

In this description balance is the dynamic relationship between each of the simultaneously sounding musical voices. Discrimination of balance is the ability to distinguish changes in these relationships. A conductor engaged in balancing an ensemble makes judgments regarding the relative loudness of each of the contributing voices or instruments and gives either verbal or nonverbal instructions to the performers in an attempt to match the ensemble sound that is being produced with the sound s/he desires to hear. Because most ensembles rehearse more than once prior to performing, it is important for the conductor to be able to make these judgments consistently from rehearsal to rehearsal. Therefore, this study sought to determine to what extent, if any persons possess the ability to discriminate and consistently judge specific musical balance.

## Purpose

The fact that this research was exploratory indicates the paucity of research directly relating to discimination of musical balance. Sources contain many statements regarding the necessity of being able to attend to problems of balance (Bodegraven and Wilson, 1942; Braithewaite, 1952; Goldman, 1934; Rudolf, 1980), however, the assumption implicit in these writings is that the ability to attend to balance will "come with experience." Carse notes that,

> . . . only the experience of doing it will help the beginner to hear what is going on in the orchestra from the standpoint of the

> conductor, and then only when his mind is not diverted from listening by the effort required to carry out the physical movements of timebeating, or by feelings of self-consciousness. (1960, p. 26)

It was the purpose of this research not only to provide objective data regarding discrimination of, and consistency of judgment of specific musical balances, but also to test the implicit hypothesis that these skills are acquired experientially. Such objective information, it was thought, would provide a basis for developing an instructional program to improve these aspects of a conductor's responsibility. Therefore, the following null hypotheses were tested:

1. There will be no statistically significant differences in performance on the Discrimination of Loudness Changes in Music Test (DOLCIM) between groups with varying levels of musical and conducting experience.

2. There will be no statistically significant difference in performance on the Consistency of Judgment of Musical Balance Test (CJMBT) between groups with varying levels of musical and conducting experience.

and the following ancillary hypotheses were studied:

1. The ability to discriminate musical balance is not affected by the instrument a person plays.

2. The ability to consistently judge musical balance is not affected by the instrument a person plays.

3. Consistency of judgment of musical balance does not decline as the time between trials increases.

4. The ability to discriminate musical balance is not affected by the level of ensemble (Junior high school, high school, college/-university) that a person conducts.

5. The ability to consistently judge musical balance is not affected by the level of ensemble a person conducts.

In order to effectively study ensemble balance in this exploratory stage, the stimuli used were limited to quartets of either woodwinds (flute, oboe, clarinet, bassoon), or brass (trumpet, horn, trombone, tuba).

## Procedure

All subjects (N=56) used in the study were from the Madison, Wisconsin area and were selected for inclusion in the following groups:

1. College freshman music majors (N=20).

2. College senior music education majors and inexperienced band directors (defined as those having up to two years teaching experience) (N=18).

3. Experienced band directors (defined as those having ten or more years teaching experience (N=18).

The criteria by which subjects were selected for inclusion into these groups served to stratify the subjects both by levels of musical experience (defined as the number of years of formal instruction in music), and by levels of conducting experience. This information was gathered by having all subjects complete a data collection sheet prior to their first testing session.

There were three test instruments used in this study: the Seashore Measures of Musical Talents Sense of Intensity subtest, the Discrimination of Loudness Changes in Music (DOLCIM) test, and the Consistency of Judgment of Musical Balance (CJMBT) test. Both the DOLCIM and CJMBT tests were constructed and piloted by the researcher prior to their use in the main study and found to be both reliable and valid instruments. The Seashore test was used to establish that all subjects could aurally discriminate measurable changes of intensity between two electronically produced tones. This measure functioned as a control because subjects who could not detect changes of 3 and 4 decibels (dB) at a 75 percent accuracy level would have been excluded from the remainder of the study. No subjects were unable to detect changes of 3 and 4 dB at that rate of accuracy.

The DOLCIM test provided two kinds of data indicating: (a) evidence of the ability to discriminate changes in the balance of a four-voice musical texture, and (b) thresholds regarding the amount of intensity change necessary for any single voice to be perceived by an individual subject as being changed. These differences, or thresholds, became the criteria for determining whether change was present in the intertrial judgments of CJMBT.

The DOLCIM test consisted of 24 items, 12 each of brass and woodwind quartets, which had been recorded on four-channel, four-track tape. Single voices were electronically intensified in each of the excerpts on the last note. These increments were randomly assigned to the instruments and were assigned 0, 3, 4.5 , 6, or 7.5 dB intensity levels. The 24 items were recorded on a master tape, then the same 24 items were randomly re-ordered and recorded on the master tape to produce a 48 item test, which required 16 minutes to administer.

The subjects were told that each of the items might be intensified on the last note and instructions recorded on the tape itself were given indicating in which instrument the change would occur if it were present. The subject's task was to listen to the excerpts and indicate on the response sheets whether or not there was a change of intensity on the last note in the instrument indicated.

The responses to DOLCIM yielded two kinds of information. The first was a score representing the total correct responses to the 48 items and reflected the subject's overall ability to discriminate changes of musical balance. The second piece of information was a set of thresholds for each subject for each of the four instrumental ranges (SATB) used on the tapes. Thresholds were defined as the smallest increment a subject heard in both occurences of the same excerpt. Therefore, if the smallest increment that a subject identified correctly for the soprano voice (either flute or trumpet in the excerpts) in both hearings was 4.5 dB, that subject's threshold for the soprano voice was recorded as 4.5 dB. The researcher interpreted this as an indication that it required an incremental change of at least 4.5 dB before that particular subject would be able to hear anything different at all. Furthermore, a subject whose soprano threshold was calculated at 4.5 dB would be expected to be able to detect greater intensification (6 and 7 db). The

Kendall Tau coefficient was calculated as .74 indicating a high degree of internal reliability for the DOLCIM test.

The CJMBT test was designed to determine to what extent a subject could consistently judge a specific musical balance. The 10 minute test consisted of two trials each of four excerpts and was administered twice with an interval of one week separating the two administrations. The trials for each of the excerpts were labeled A, B, C, and D. Trials A and B were administered during the first week and trials C and D during the second. Trial A of each of the excerpts was a practice session and was not used in the intertrial comparisons. Trial B was the criterion trial against which the subsequent trials were compared.

The test was administered to individual subjects at a four-channel, four-track tape recorder at a distance of 10 feet from a set of four speakers, each corresponding to one instrument of the recorded quartets. The subject's task was to manipulate the loudness dials of the tape recorder to a point where s/he felt that the balance among all four voices was acceptable. Prior to each example three of the four loudness dials were set to random loudness levels and the fourth was set to the upright position. The subjects were instructed that they were not allowed to touch the dial that had been placed in the upright position. This helped to avoid overall dynamic shifts which might have occurred had the subjects been allowed to manipulate all four dials. The completion of two hearings of each excerpt constituted one test. The test was repeated a week later to study the effect that time between trials had on an individual's consistency of judgment.

Two scores were derived from the CJMBT data sheets. The first set of scores were tallies of individual voices judged consistently between two trials. For instance, if in Trial C, excerpt number one, a subject set the tenor and bass voices to levels that there within one threshold (as determined by DOLCIM) of that same subject's settings on Trial B (the criterion trial) for the same excerpt, s/he was given a 2 (out of a possible 3) for excerpt one, test one. CJMBT scores always represented comparisons between trials. The second group of scores derived from the CJMBT represented the number of times a subject matched all three of the manpulable voices of a trial to the criterion trial. These scores were labeled the total full excerpt match scores and ranged from 0-8.

## Results

The first hypothesis was investigated by performing a one-way analysis of variance (ANOVA) using group (muscial experience level) as the independent variable and the DOLCIM score as the dependent variable. The ANOVA revealed no differences which were significant at the .05 alpha level, therefore the null hypothesis was not rejected.

The second hypothesis was investigated by performing an ANOVA using group as the independent variable and the CJMBT total full excerpt match scores as the dependent variable (see Table 1). The ANOVA indicated significant differences between groups and subsequent testing using the Scheffe' procedure revealed that these differences were between Groups 1 and 3 with Group 3 having the higher mean. Comparisons between all other pairs of Groups were not found to be significantly different.

Table 1

Analysis of Variance of CJMBT Scores
by Level of Musical Experiences

| Source of Variation | df | SS | MS | F | p |
|---|---|---|---|---|---|
| Level of Musical Experience | 2 | 13.79 | 6.90 | 5.52* | .006 |
| CJMBT Total Full Excerpt Matches | 53 | 66.19 | 1.25 | | |
| Total | 55 | 79.98 | | | |

Note * = significant at .05

Ancillary hypothesis one was investigated by performing an ANOVA using the DOLCIM scores as the dependent variable and the instrument played by the subject as the independent variable. No statistically significant differences were found at the .05 alpha level, therefore, the null hypothesis was not rejected.

Ancillary hypothesis number two was investigated by performing an ANOVA using the CJMBT total full excerpt match scores as the dependent variable and the instrument played as the independent variable. No statistically significant differences were found at the .05 alpha level, therefore, the null hypothesis was not rejected.

Ancillary hypothesis number three was investigated by performing t-tests on all possible pairs of means of individual voice matches for the CJMBT. In order to reject the null hypothesis the CD mean should have been higher than than the BD mean in the CD to BD comparison, therefore, the null hypothesis can not be rejected. The fact that the BD means were significantly higher than the BC means in the BD to BC comparison suggests that time between trials may play some role in the ability to consistently judge musical balance.

Ancillary hypothesis number four referred to Group 3 only and was investigated by performing an ANOVA using the level of ensemble conducted by the subject as the independent variable and the DOLCIM scores as the dependent variable.

Table 2

Analysis of Variance of DOLCIM Scores
by Level of Ensemble Conducted

| Source of Variation | df | SS | MS | F | p |
|---|---|---|---|---|---|
| Level of Ensemble | 2 | 102.67 | 51.33 | 3.75* | .0478 |
| DOLCIM Scores | 15 | 205.33 | 13.69 | | |
| Total | 17 | 308.00 | | | |

Note * = significant at .05

Although the ANOVA indicated significant effects between groups below the .05 alpha level (see Table 2), subsequent manipulation of the data according to Scheffe's procedure failed to indicate between which groups the effects occurred. Since all data was tested using SSPS-X, mathematical error would not seem to explain this anomaly.

Ancillary hypothesis number five was investigated by performing an ANOVA using the level of ensemble the subject conducted as the independent variable and the CJMBT total full excerpt match score as the dependent variable. While an examination of the means (see Table 3) reveals rather large differences between levels, the ANOVA failed to indicate any statistically significant ones at the .05 level. Therefore, the null was not rejected.

Table 3

Means and Standard Deviations of DOLCIM and CJMBT Scores by Level of Ensemble Conducted (Group 3 only)

|  |  | DOLCIM |  |
|---|---|---|---|
| Group | N | Mean | SD |
| Junior HS Teachers | 4 | 38.00 | 4.32 |
| Senior HS Teachers | 6 | 32.33 | 2.58 |
| University Teachers | 8 | 37.00 | 4.07 |
| Total | 18 | 35.67 | 4.26 |

Note. Maximum score = 48

|  |  | CJMBT |  |
|---|---|---|---|
| Junior HS Teachers | 4 | 1.00 | 1.41 |
| Senior HS Teachers | 6 | 2.50 | 1.87 |
| University Teachers | 8 | .87 | .83 |
| Total | 18 | 1.44 | 1.50 |

Note. Maximum score = 8

## Discussion

The results of analyses regarding discrimination of balance of wind quartets performed in this study support the following statements:

1. A person's level of musical experience does not affect the ability to discriminate changes in the musical balance of wind quartets.

2. The instrument a person plays does not affect a person's ability to discriminate changes in the balance of wind quartets.

3. The level of ensemble a person conducts does affect the ability to discriminate changes in the musical balance of wind quartets.

These findings are presented with the following cautions to the reader. First, due to the nature of this study and the setting in which it took place, the author had little opportunity to randomly select subjects from a general population. Although these were not in-tact groups all subjects volunteered to participate in the study. Second, discrimination of balance of vocal, or string quartets, or of larger ensembles may or may not be closely related to discrimination of balance as it was investigated in this study. Third, the significant effect indicating that the level of ensemble a person conducts affects their ability to discriminate balance of wind quartets may indicate an anomaly in the Group 3 sample to a greater degree than it represents any meaningful differences between the level of ensemble conducted as a grouping variable. The distribution of DOLCIM scores over all groups is remarkable normal. Because of this and the fact that it seems to be largely unaffected by grouping variables, one might reasonably speculate that discrimination of musical balance of wind quartets may be a personal attribute much like the ability to discriminate changes of pitch, and may vary in the population as a result of individual differences and not due to musical training or conducting experience.

Based on the statistical analyses regarding consistency of judgment of musical balance of wind quartets performed in this study the following statements can be made:

1. The ability to consistently judge musical balance of wind quartets is not affected by the instrument a person plays.

2. The ability to consistently judge musical balance is not affected by the level of ensemble a person conducts.

3. The ability to make consistent judgments of musical balance of wind quartets is affected by the amount of musical training and conducting experience a person has.

Since discrimination seemed not to be affected by training in music or by conducting experience, but the ability to make consistent judgments about musical balance was affected by those variables, there is evidence that the two may be fundamentally different processes. Further research is needed to better understand the relationship between them. It is recommended that a replication study be attempted utilizing randomly selected subjects to grant the future researcher greater generalizability, and the addition of a group of non-music majors to provide further evidence of the effects of musical training. Further, if the two processes, discrimination of musical balance, and consistency of judgment of musical balance, are indeed fundamentally different, there should be no significant differences between the non-musicians and the musicians on discrimination while there should be differences between the two groups with regard to consistency.

Perception of musical balance of ensembles, regardless of size or instrumentation, is one of the major responsibilities of the conductor. Additional research should be undertaken in a continuing effort to explicate these phenomena.

## References

Bodegraven, P. van, & Wilson, H. (1942). The school music conductor. Chicago: Hall and McCreary Co.

Braithwaite, H. (1952). The conductor's art. London: Norgate, Ltd.

Carse, A. (1960). Orchestral conducting. London: Galliard Ltd.

Collings, D. (1973). Development and evaluation of techniques to improve the skill of student conductors in detecting errors of pitch in musical performance while reading 5-part and 6-part conductor's scores. (Doctoral dissertation, University of Southern Mississippi). DAI 43(8), 4820-A. (University Microforms LC 73-31, 988)

Geringer, J. (1976). Tuning preferences in recorded orchestral music. Journal of Research in Music Education, 24, 169-176.

Goldman, E. (1934). Band betterment. New York: Carl Fischer, Inc.

Gonzo, C. (1969). An analysis of factors related to choral teacher's ability to detect pitch errors while reading the score. (Doctoral dissertation, University of Wisconsin-Madison). DAI 1971, 31(2), 784-A. (University Microforms 70-03543)

Grunow, R. (1969). An analysis of factors related to choral teacher's ability to detect pitch errors while reading the score. (Doctoral dissertation, University of Michigan). DAI 1981, 41(2), 580-A. (University Microforms 807275)

Hansen, L. (1961). A study of score reading ability of musicians. *Journal of Research in Music Education*, *9*(2), 147-156.

Liles, J. (1978). A study of the effectiveness of rhythmic drill materials with student/ conductor-teachers while conducting a live ensemble from a full score. (Doctoral dissertation, Ohio State University) DAI 1979, 3, 4797-A. (University Microforms 7902166)

Michels, W. (1972). A visual-aural self-instructional program in pitch-error detection for student conductors. (Doctoral dissertation, North Texas State University). (University Microforms LC 73-2920)

Pontius, M. (1982). A profile of rehearsal techniques and interaction of selected band conductors. (Doctoral dissertation, University of Illinois). DAI 1983, 2, 966-A. (University Microforms 8302966)

Ramsey, D. (1978). Programmed instruction using full-score band literature to teach pitch and rhythm error detection skill to college music education students. (Doctoral dissertation, University of Iowa). DAI 1979, 39, 4798-A. (University Microform 79029032)

Rudolf, M. (1980). *The grammar of conducting, 2nd ed*. New York: Schirmer Books, 1980.

Shaw, T. (1971). A program to improve choral conducting students ability to detect errors in choral rehearsal. (Doctoral dissertation, North Texas State University). DAI 1972, 32(12), 7034-A. (University Microforms 72-17026)

Sidnell, R. (1971). Self-instructional drill materials for student conductors. Journal of Research in Music Education, 6(1), 85-91.

Sidnell, R. (1968). The development of self-instructional drill materials to facilitate the growth of score reading skills of student conductors. Final report (RMQ66004) Office of Education (Department of Health, Education, and Welfare). Washington, D.C.: Bureau of Research, 1968. (ERIC ED023344).

Sorenson, J. (1974). Modalities of musical attention and perception: A phenomenological view of aesthetics and style. (Doctoral dissertation, University of Washington) DAI 35(8), 5454-A. (University Microforms LC 75-984).

Wapnick, J. (1980). Pitch, tempo, and timbral preferences in recorded piano music. Journal of Research in Music Education, 28(1), 43-58.

Wyatt, L. (1974). The development and testing of auto-tutorial instructional materials for choral conducting students. (Doctoral dissertation, Florida State University). (University Microforms LC 75-984)

# COMPARATIVE METHODS FOR TEACHING IRREGULAR METER THROUGH BALKAN MUSIC TO ELEMENTARY SCHOOL STUDENTS

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One important issue within the music education profession is the development of effective approaches for the teaching of rhythmic concepts to elementary school students. Music textbooks abound with lessons teaching that the beat is basic to a musical composition, and that the pulse is felt in metric groupings of two or three. Rarely do the music textbooks provide for the learning of music in irregular meter, or units that combine groupings of twos and threes.

Non-musical tasks often employ rhythm and meter as a learning aid for young children. Counting, reciting the alphabet, nursery rhymes, and multiplication tables frequently involve the use of metric chant at the elementary school level. At an early age, rhythmic behavior through movement can be observed as children hop, skip, jump, swing and rock to a natural internalized rhythm. If children can respond accurately to metric groupings of twos and threes, then the potential response to irregularly metered music (i.e., five and seven beat units), may be latent but waiting development. It may be that irregular meter, although initially complex, can be reduced to a level of understanding that will permit performance ability and discrimination skills in the elementary grades.

## Related Literature

Theorists generally agree that rhythmic perception is dependent upon two factors, both of which emphasize the aspect of meter: subjective rhythm, the instinctive tendency to group uniform successions of sound; and objective rhythm, in which periodicity is regularly emphasized (Seashore, 1938; Farnsworth, 1969). Rhythmic structure is viewed from the basic aspects of meter, tempo, accents, and pattern (Radocy and Boyle, 1979; Creston, 1964). Gordon (1971) theorized that rhythm has three elements: tempo beats, melodic rhythym, and meter beats. Meter beats may be realized by the student through kinesthetic response. Assuming the responsibility that some meters are "enrhythmic," students listening to a musical selection might quickly determine that the meter is irregular, but may need more listening time to determine the combination of 2's and 3's in order to identify the meter (Gordon, 1977).

Numerous writings have emphasized rhythmic training through muscular response (Mursell, 1927; Pflederer, 1963; Jaques-Dalcroze, 1921; Orff, 1956; Kodaly, 1974; Stockton, 1982; Thackray, 1969). A review of the literature offers evidence that an effective sequence of rhythmic training in elementary school might begin with kinesthetic experiences, followed by conceptualization and verbalization. Research suggests that rhythmic response may involve an assessment of three types of behavior: (a) behaviors requiring discrimination between aurally presented stimuli, (b) behaviors reflecting an ability to associate notational symbols with aurally presented rhythm patterns, and (c) movement behaviors demonstrating an ability to keep time with the beat or to reproduce an aurally presented rhythm pattern.

Motor response is a significant factor in the perception of rhythm (Ruckmick, 1913). It seems to be necessary for the initial establishment of a rhythmic pattern, after which it is not necessary for the future perception of the pattern (Critchley and Henson, 1977). Proprioceptive feedback, or the internal physiological process of nerve excitements, contributes to the learning of rhythm. Mechanical performance alone does not sufficiently stimulate the sensory system, but an awareness of behavior performance may be an essential component in the bridging between processes.

Experiences in movement enhance the development of motor skills, with varied experiences transferring to establish a new motor schema (Kelso and Norman, 1978; Adams, 1971; MacKay, 1982). When first learning a skill the motor and verbal stages interact; after some proficiency the verbal system is dropped. As motor skill develops, there is an increased dependency upon proprioception which causes the action to become more automatic (Wilson, 1982; Kallan, 1972; Staum, 1982). Much the same can be said for dancing, in that early response of rhythmic movement to music involves conscious verbal-motor activity ("left, right," etc.), or counting out beats while stepping a pattern. As performance becomes fluid and skillful, the verbalization drops out and the dance performance becomes an automatic muscular activity.

Motor skills vary among individuals; however, maturation is an influential factor. Gilbert (1980) demonstrated that age is a significant factor in performance of motor music skills. Petzold (1966) found grade level to be significant in children's ability to respond to aural presentation of rhythmic patterns and maintain a steady beat. Thackray's (1972) investigation of chilren's rhythmic perception and performance concluded that both these abilities develop more rapidly until about ages eleven or twelve years.

There is conflicting evidence as to whether gross motor skills involving arms, legs, and torso, or small motor skills such as required in vocalization or clapping are more appropriate learning avenues for children. Since bodily response to music is more involved than vocalization, students who are given opportunities to move to music establish more channels of response to the music. It follows that rhythmic instruction utilizing the kinesthetic sense in singing and patterned dance movements might be more apt to promote accurate perception of meters than exercise activities which drill rhythmic patterns through notation, rhythmic dictation, and counting; but such research has not been initiated.

Although it has been established that movement experience elicits a greater facility for rhythmic perception (Ruckmick, 1913; Boyle, 1968), there is little evidence of the use and effects of folk dance by music specialists to teach rhythmic perception. Instructors of physical education frequently include folk dancing in their curriculum for the development of motor coordination skills, but the musical aspects are subordinate. Meter and rhythm are important to the movement execution, but students are not required to attend to these aspects in a musical way.

## Purpose of Study

The purpose of this study was to examine the effectiveness of two instructional methods on children's perception and performance of music in irregular meter. Because proprioceptive feedback may be necessary for the acquisition of motor skills, the two methods studied the effect of magnitude of movement on student response to meter. The investigation compared a performance-oriented approach with a more traditional method in the conceptualization of irregular meter. The effects of two independent variables, instruction method and grade level, were studied.

In classroom music activities, duple meter is the most prominent grouping of beats, followed by triple meter. A review of music textbooks demonstrates that music of irregular meter comprises less than 1% of the song material used in books published between 1926 and 1969, and less than 3% in the textbooks published from 1970 to 1976 (Diaz, 1980). There is an apparent lack of emphasis on songs which feature metric groupings of five and seven. Teaching strategies for increased responsiveness and sensitivity to odd-beat meters have not been clearly developed. Music of the Balkans was chosen for this study because of the characteristic irregular meter. Aspects of Balkan culture were also studied, and an attitudinal survey was employed following the posttest.

## Procedures

Subjects for the study were two classes each of fourth and fifth grade students. There were 23 students in each class. Initial illustrations of regular meter, definitions, concepts of Balkan culture, and the final review were presented to all classes. All groups received seven hearings of Balkan folk songs, although the activity that accompanied the songs varied with the method. One class each at the fourth and fifth grade level were given irregular meters of five and seven beats through the SD and CCW methods of instruction. After pretesting, eight lessons of thirty minutes each were given, with class time divided into twenty minutes of music and ten minutes of culture. Aspects of Balkan music and culture were presented to provide variety within the music class, and to render a fuller understanding of the music employed in the rehearsal of irregular meters.

All lesson songs were tape-recorded by a tamburitza group consisting of berde (stringed bass), bugaija (rhythm), brac (melody), prim (countermelody), and an accordion. The lesson songs were played and sung, using English lyrics followed by lyrics in the language of the song's origin.

In the SD (song and dance) method, all lesson songs were sung and performed in kolo (circle dance) style. The CCW (clap, chant, written tasks) method utilized small motor movements of clapping, patsching (tap), and the chanting of rhythmic syllables in the learning of meter within the lesson songs. They also performed written tasks while listening to the music in the study.

After introductory work, the SD group was shown a song in the lesson meter of the day, and listened to a tape recording of the song. The class then sang each phrase after the teacher in rote fashion, while reading the music and English words displayed by the overhead projector. This process was repeated twice, followed by singing the entire song two times with some movement indicating the accented pulse. Simple dance steps to the song were then taught. Emphasis was on feeling the beat and moving to it, rather than precision of step. The tape recorded song was again played and the class danced to it. On the last song repetition, the group simultaneously sang and danced.

Following the introduction given to both classes, the CCW group was shown a rhythm exercise in the lesson meter of the day and asked to echo-clap after the teacher. The class echoed the teacher on the rhythm syllables of "ta" and "ti." The teacher then projected the rhythm patterns of the lesson song on an overhead transparency and the class was asked to listen to the song. The class clapped the rhythm patterns while the song played twice. During the last four lesson song repetitions, the group worked on a brief worksheet task, such as completing measures with notes or rests, the measured being in the meter of the day's lesson.

The dependent variables included perception and performance measures of irregular meter, and an achievement test of Balkan music and culture. An attitudinal survey was also administered. The meter discrimination test consisted of identifying the meters of recorded instrumental selections and taped piano excerpts. Students were asked to circle 2, 3, 5, or 7 as an indication of meter on a score sheet. The piano excerpts were composed melodies played at the same tempo (M=12).

Auditory-visual discrimination required the matching of a notated rhythm pattern to the rhythm sounded by the test administrator. Same/different meter discrimination consisted of pairs of aurally presented patterns in which subjects determined the second rhythm as same or different from the first. Ten pairs each of monophonic and chordal accompanied melodies were presented.

An understanding of Balkan music and culture was measured through a series of multiple-choice items and true/false statements. Musical instruments, song genres, folk arts and customs provided the focus of the achievement test. While perception and cultural knowledge tests were administered to all members of a treatment group simultaneously, rhythmic performance ability was tested individually. Notation for five four-measure rhythms, three in 5/8 and two in 7/8, was presented to the student who was asked to tap the rhythms on a slit woodblock.

Directions for the meter discrimination and auditory-visual tests were taped and printed on the student answer sheets. To surmount problems in the reading of foreign words, responses on the Balkan achievement test were read aloud by the teacher.

## Results

Gain scores in perception, performance, and on the achievement test were derived from the pretest and posttest scores and were used as raw scores in the analysis of those variables. T tests performed on pretest to posttest scores indicated that all groups exhibited significant gains ($P<.05$) on each dependent variable, with the exception of the Grade Five SD method group's performance on the meter discrimination subtest. Statistical analysis was performed through the NWA STATPAK program (Northwest Analytical Inc., Portland, Oregon, 1984).

Table 1 displays data summarization for Meter Discrimination. While all groups exhibited gains in pretest to posttest scores, there were no significant differences between grade levels or methods.

Table 1

ANOVA of Gain Scores for Grade Level and Method
Meter Discrimination Subtest

| SOURCE | SUM OF SQUARES | d.f. | MEAN SQUARE | F |
|---|---|---|---|---|
| Grade | 16.533 | 1 | 16.533 | 1.93 |
| Error | 188.217 | 22 | 8.555 | |
| Method | .272 | 1 | .272 | .061 |
| Error | 97.478 | 22 | 4.431 | |
| Gr x Meth | 3.924 | 1 | 3.92 | .407 |
| Error | 211.83 | 22 | 9.63 | |

$p = >.05$

Table 2 presents data summarization for the measure of Auditory/Visual Perception. A significant difference between methods was noted. Although mean scores increased for all groups, the SD method was superior to the CCW method in the development of the ability to match notated rhythms to the sound of the patterns.

Table 2

ANOVA of Gain Scores for Grade Level and Method
Auditory/Visual Perception Subtest

| SOURCE | SUM OF SQUARES | d.f. | MEAN SQUARE | F |
|---|---|---|---|---|
| Grade | 43.14 | 1 | 43.14 | 3.76 |
| Error | 252.61 | 22 | 11.48 | |
| Method | 30.53 | 1 | 30.53 | 7.13* |
| Error | 94.22 | 22 | 4.28 | |
| Gr x Meth | 5.75 | 1 | 5.75 | .92 |
| Error | 138. | 22 | 6.27 | |

p = >.05

Cell Means and Standard Deviations
AUDITORY/VISUAL PERCEPTION SUBTEST

| | GROUP 1 - SD | | GROUP 2 - CCW | |
|---|---|---|---|---|
| | Pretest | Posttest | Pretest | Posttest |
| GRADE FOUR | X = 22.13<br>N = 23<br>s.d.= 3.95 | X = 25.0<br>N = 23<br>s.d.= 3.9 | X = 24.04<br>N = 23<br>s.d.= 2.96 | X = 25.26<br>N = 23<br>s.d.= 2.8 |
| GRADE FIVE | X = 25.7<br>N = 23<br>s.d.= 2.98 | X = 26.7<br>N = 23<br>s.d.= 2.8 | X = 26.13<br>N = 23<br>s.d.= 2.75 | X = 26.48<br>N = 23<br>s.d.= 2.59 |

Results of the rhythmic performance task indicated that a marked improvement occurred within the four groups as a result of treatment (Table 3). Students instructed in the SD method at the fifth grade level showed the greatest mean score gain.

Table 3

ANOVA of Gain Scores for Grade Level and Method
Performance Subtest

| SOURCE | SUM OF SQUARES | d.f. | MEAN SQUARE | F |
|---|---|---|---|---|
| Grade | 35.315 | 1 | 35.315 | .646 |
| Error | 1202.435 | 22 | 54.656 | |
| Method | 110.88 | 1 | 110.88 | 2.38 |
| Error | 1023.87 | 22 | 46.54 | |
| Gr x Meth | 247.84 | 1 | 247.84 | 6.66* |
| Error | 817.91 | 22 | 37.18 | |

p = *.05

Cell Means and Standard Deviations
PERFORMANCE SUBTEST

| | GROUP 1 - SD | | GROUP 2 - CCW | |
|---|---|---|---|---|
| | Pretest | Posttest | Pretest | Posttest |
| GRADE FOUR | X = 10.35<br>N = 23<br>s.d.= 5.73 | X = 16.74<br>N = 23<br>s.d.= 6.55 | X = 11.04<br>N = 23<br>s.d.= 3.91 | X = 18.52<br>N = 23<br>s.d.= 7.66 |
| GRADE FIVE | X = 15.09<br>N = 23<br>s.d.= 6.91 | X = 26.0<br>N = 23<br>s.d.= 9.01 | X = 12.7<br>N = 23<br>s.d.= 4.73 | X = 18.13<br>N = 23<br>s.d.= 7.36 |

Table 4 displays the results of the achievement test. While all groups exhibited gains, no significant effects of grade level or method were found.

Table 4

ANOVA of Gain Scores for Grade Level and Method
Achievement Subtest

| SOURCE | SUM OF SQUARES | d.f. | MEAN SQUARE | F |
|---|---|---|---|---|
| Grade | 5.75 | 1 | 5.75 | .727 |
| Error | 174.0 | 22 | 7.91 | |
| Method | .88 | 1 | .88 | .103 |
| Error | 187.87 | 22 | 8.54 | |
| Gr x Meth | 3.14 | 1 | 3.14 | .378 |
| Error | 182.61 | 22 | 8.3 | |

$p = > .05$

## Discussion

Simple division of the musical pulse into groups of two or three beats is a concept formed early in musical training. While the capability of responding rhythmically to music may be an inherited trait, the effect of rhythmic training on conceptual understanding and psychomotor skills has been demonstrated in the literature. Therefore, an important objective in school music programs is the development of rhythmic sensitivity, including an understanding of metric groupings of rhythmic pulses and patterns. Of the various approaches to rhythm and meter, methods which emphasize motor reponses in clapping or in movement are the most common. This investigation sought to determine the effectiveness of methods on perception and performance of irregular meter.

While all groups improved meter discrimination, neither grade level nor method exhibited significant increase in meter discrimination. The CCW method which combined listening exercises and rhythmic drills in the teaching or irregular meter was not more significantly effective in the development of meter discrimination than the marginal improvement of the SD method.

The issue of tempo in discerning metric groupings merits consideration. It is not clear was to whether each eighth note was heard individually (7/8 ♪♪♪♪♪♪♪) at slower tempos, thereby conveying the sense of seven beats in a group, or whether only the accented notes (7/8 ♪(♪ ♪) ♪ (♪) ♪ (♪) ) three groups of 3-2-2) were perceived in quick-tempoed music. As the tempo of the taped piano melodies in irregular meter was kept at a constant setting of 120, accents may have appeared distorted as the seven individual pulses received greater emphasis. In 7/8 meter, the tightly packaged units of 3-2-2 may have become stretched in the slow tempos of the piano melodies so to present each beat as an isolated sound unit. Alternately, the recorded orchestral selections were performed in moderate to fast tempos. The complexity of perceptual processing is magnified when a child's conception of meter is traditionally related to counting the number of unaccented beats which follow each accented one. In irregular meters of five and seven beats set to a fast tempo, the rule no longer applies and confusion may result without extensive instruction in the new concept.

In the posttests students often identified meter as irregular, but mislabelled five for seven beats, or seven for five. Although metric unevenness was perceived, an extended period of instruction might have increased the likelihood of more accurate responses. The intention of brief treatment was to limit students' exposure to Balkan music, since eight lessons is considered a sufficient introduction to a musical style at that level. As a consequence, the conceptual development of irregular meter was minimal.

In Auditory/Visual Perception, the SD (song-dance) method was superior in eliciting gains at both fourth and fifth grade levels. The use of multiple channels of response to music, as in singing and dancing, contributes to significant gain in auditory/visual discrimination of meter. Grade Four SD method exhibited the greatest mean score gain, demonstrating that instruction in movement to irregularly metered music need not be delayed until later years, as it does contribute to development of auditory/visual perception. Additionally, it might be more natural for the CCW (clap, chant, written tasks) method groups to have shown significant improvement in this category, since they were working with notation and written tasks. But such improvement was not evidenced and the more active SD method, whose exposure to notation was limited to reading from an overhead projection of the entire song, was significantly more effective.

Performance scores of all four groups increased from pretest to posttest. Both fifth grade groups exhibited higher pretest scores as well, indicating that maturation and greater experience in school music instruction prior to treatment may have been related to rhythmic accuracy. Since the Grade Five SD method demonstrated the greatest gain, and Grade Four CCW next highest, one might infer that a singing-dancing approach to meter/rhythm is more effective at the fifth grade level, while the tasks of clapping and chanting may be a more focused introduction to irregular meter at the earlier grade level.

The exact nature of rhythmic performance has yet to be established; however, it derives from mental and muscular activity. Performance requires coordinated muscular movements. The literature on motor response strongly indicates that one's own effort contributes to skilled performance. In the beginning stages this effort is conscious and often verbal; as performance becomes skilled and proprioceptive feedback channels increase in potency, verbalization is internalized and eventually diminished. In the SD instruction method, the vocalizations "left-right" were eventually faded, and the transferal of foot rhythms to rhythmic performance on the woodblock was successfully accomplished. Those students in the CCW group were given substantial training and practice in rhythmic performance through the scheduled drills, and this was evidenced in the post-treatment performance. Regardless of method employed, the physical involvement of students in rhythmic experiences was an aid to learning. Given the complexity of rhythmic abilities, indications are that rhythmic training must encompass a variety of activities, and the psychomotor domain featured in rhythmic performance cannot be viewed in isolation from perceptual processing.

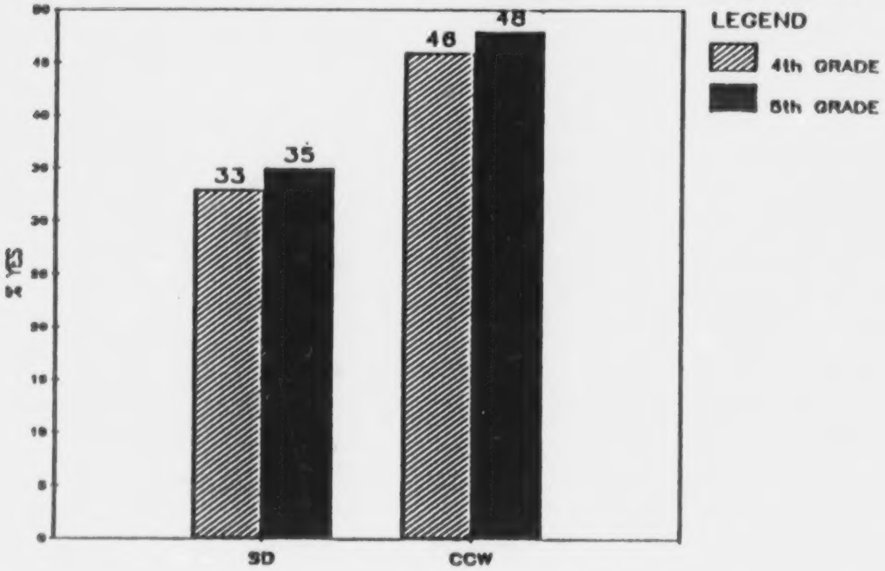
Results of the achievement test on Balkan music and culture were similar in all four groups. Students at both grade levels learned aspects of Balkan culture and facts about Balkan music, demonstrating that the cognitive domain in music learning is well-established through similar learning experiences in the academic subjects. The aural perception of music is more subtle. Knowledge about music is acquired more quickly than sensitivity to musical structure. Perception and performance skills need nurturing in both school and out-of-school experiences.

Since Balkan folk music is frequently set in irregular meter, this genre was selected for illustration of the concept. This was problematic in determining the length of the study unit, because although the lessons may have been sufficient for presenting an introduction to Balkan music and culture, it was too limited a time for developing a conceptual understanding of irregular meter.

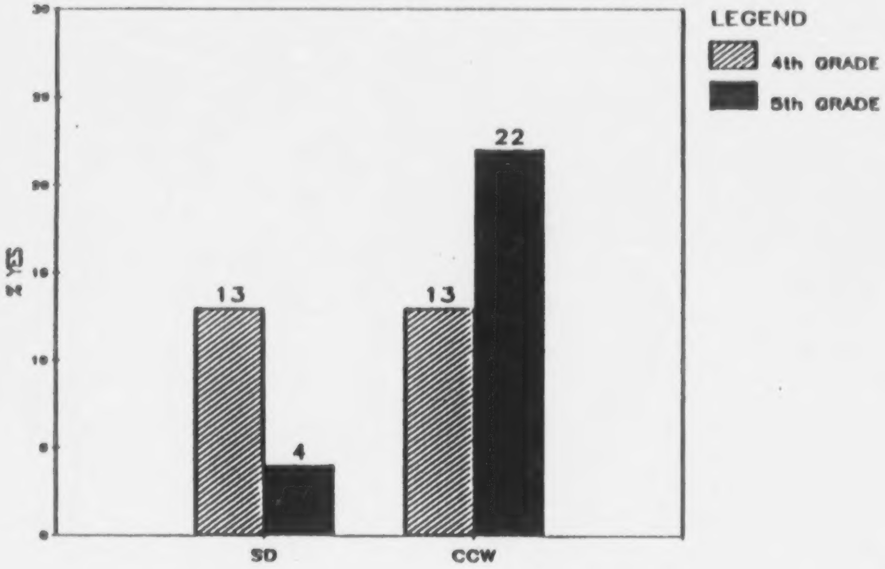
The possibility exists that fifth grade students with one additional year of experience in movement had established a more complete system of proprioceptive feedback, resulting in greater accuracy of performance skills as well as perceptual responses. The CCW instruction activities and subtest tasks were quite similar, whereas the SD method demanded a higher level of transfer and inference. The older the child, the more likely s/he was to understand the concept of irregular meter through the somewhat less direct SD method. While physical and intellectual development may be a slight barrier to total mastery of perception and performance skills, this is no basis for the avoidance of early exposure to irregular meter. A variety of experiences in the second and third grade might be incorporated to provide understanding of both regular and irregular meter. First clapping and chanting, then performance on classroom instruments, and finally simple folk dances might be a logical sequence for presenting meters of five and seven. Such activities might be best spread over an extended time, rather than to overload within a brief period. Contemporary music of such composers as Stravinsky and Bartok are replete with irregular meters, and as such should be included in elementary general music classes. Excerpts should be clear-cut, and students should be carefully guided to feel the beat divisions through movement, whether it be conducting gestures, clapping, patsching, or simple step patterns.

In support of the trends in multicultural education and arts in general education, the results of this investigation demonstrate also that instruction in the music and culture of various ethnic groups may be successfully intermingled in the general music classroom. The music educator may serve well as a curriculum specialist in designing materials for greater understanding of world cultures.

RESULTS OF ATTITUDINAL SURVEY
DO YOU FIND BALKAN MUSIC INTERESTING?



RESULTS OF ATTITUDINAL SURVEY
DO YOU LIKE BALKAN MUSIC?



## References

Adams, J.A. (1971). A closed-loop theory of motor learning. *Journal of Motor Behavior*, *3*(2), 111-149.

Boyle, J.D. (1968). The effects of prescribed rhythmical movements on the ability to sight-read music. *Dissertation Abstracts*, *29*, 2290-2291, University of Kansas.

Choksy, L. (1981). *The Kodaly context; creating an environment for musical learning*. Englewood Cliffs, NJ: Prentice-Hall, Inc.

Colwell, R. (1965, 1969). *Elementary Music Achievement Test*. Chicago: Follett.

Creston, P. (1964). *Principles of rhythm*. New York: Franco Colombo, Inc.

Critchley, MacDonald and Henson, R.A. (Eds.) (1977). *Music and the brain: studies in the neurology of music*. London: William Heinemann Medical, Books, Ltd.

Dainow, E. (1977). Physical efects and motor responses to music. *Journal of Research in Music Education*, *25*(3), 211-221.

Diaz, M.C. (1980). An analysis of the elementary school music series published in the United States from 1926-1976. Doctoral dissertation, University of Illinois.

Farnsworth, P. (1969). *The social psychology of music*. 2nd ed. Ames, IA: Iowa State University Press.

Gilbert, J. (1980). An assessment of motor music skill development in young children.

*Journal of Research in Music Education*, *28*(3), 167-175.

Gordon, E.E. (1977). Learning sequence and patterns in music (revised ed.). Chicago, IL: G.I.A. Publications, Inc.

Gordon, E. (1971). *The psychology of music teaching*. Englewood Cliffs, NJ: Prentice-Hall, Inc.

Gordon, E.E. (1965). *Music Aptitude Profile*. Boston: Houghton Mifflin Co.

Jaques-Dalcroze, E. (1921, 1967). Rhythm, music and education. (Harold F. Rubenstein, trans.) New York and London: G.P. Putnam's Sons. (Revised edition, London, Dalcroze Society).

Kallan, C.A. (1972). Rhythm and sequencing in an intersensory approach to learning disability. *Journal of Learning Disability*, *5*(2), 68-72.

Kelso, J.A., Norman, S. and Norman, P.E. (1978). Motor schema formation in children. *Developmental Psychology*, *14*(2), 153-156.

Kodaly, Z. (1974). *The selected writings of Zoltan Kodaly*. London: Boosey and Hawkes Music Publishers, Ltd.

MacKay, D.G. (1982). The problems of flexibility, fluency, and speed-accuracy trade-off in skilled behavior. *Psychological Review*, *89*(5), 485-506.

Meyer, M.F. (1929). *The musician's arithmetic*. Boston: Ditson.

Mursell, J.L. (1927). Principles of musical education. New York: Macmillan Co.

Mursell, J.L. and Glenn, M. (1931). The psychology of school music teaching. New York: Silver Burdett and Co.

Orff, C. and Keetman, G. (1956). Music for children. Hall, D. and Walter, A. English adaptation. Mainz, Germany: B. Schott's Sohne, New York: Schott Music Corporation (Associated Music Publishers, Inc.)

Petzold, R.G. 91966). Auditory perception of musical sounds by children in the first six grades. U.S. Department of HEW cooperative reearch project #1051. Madison: University of Michigan.

Pflederer, M. (1963). Responses of children to musical tasks embodying Piaget's principle of conservation. Urbana, IL: University of Illinois.

Radocy, R.E. and Boyle, D.J. (1979). Psychological foundations of musical behavior. Springfield, IL: Charles C. Thomas, Publishers.

Ruckmick, C.A. (1913). The role of kinaesthesis in the perception of rhythm. The American Journal of Psychology, 24, 305-359.

Seashore, C.E. (1938). Psychology of music. New York: McGraw-Hill Book Co.

Shaffer, L.H. (1982). Rhythm and timing in skill. Psychological Review, 89(2), 109-122.

Shehan, P.K. (1981). Student preference for ethnic music. Contributions to Music Education, 9, 21-28.

Staum, M.J. (1982). Music and rhythmic stimuli in the rehabilitation of neuromusculoskeletal gait disorders. Doctoral dissertation, Florida State University.

Stockton, J.L. (1982). An experimental study of two approaches to the development of aural meter discrimination among students in a college introductory music class. Doctoral dissertation, Temple University.

Thackray, R. (1969). An investigation into rhythmic abilities. Music Education Research Papers, 4 (London: Novello & Company Ltd.).

Wilson, F.R. (1982). Mind, muscle and music. The American Music Teacher, 32(1), 12-15.

# RETENTION OF MUSIC LEADERSHIP IN THE CHURCH OF THE NAZARENE

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This paper is an investigation into the retaining of music leaders trained in Nazarene colleges in the Church of the Nazarene. A central aim is to assess the current level of retention and to present possible ways of improving that retention as well as making existing music leadership more effective.

The study is limited to only those who hold liberal arts degrees with emphasis in music education, music performance, church music, or church music/Christian education from any of the eight Nazarene colleges in the United States. Music leadership is defined as "the directing of any ensemble of any size whether vocal or instrumental, or serving as church organist, pianist, or guest musician."

The study design involved obtaining information from three sources. These sources include a survey sent to 400 music graduates selected at random, a survey sent to 100 Nazarene pastors selected at random, and interviews with music administrators at each of the eight Nazarene colleges in the United States.

The questions in the surveys are divided into seven categories. From the analysis of these categories it was learned that roughly 52.0 percent of all music graduates since 1939 are currently church music leaders. Approximately 46.0 percent are currently music leaders in Nazarene churches. Roughly 86.0 percent of all music graduates have at some point since graduation held positions of church music leadership.

Improvement in the retention of music leadership in the Church of the Nazarene might be improved, as suggested in the surveys, through minor alterations in church policy, more realistic college preparation, and through better music and worship preparation of Nazarene pastors. The effectiveness of church music leadership might be improved through making one or more church music courses mandatory of all music majors, greater emphasis on field work or an apprenticeship in church music, the establishment of a graduate program in church music, and through increased denominational support.

## A GUIDE TO THE SOLO PIANO MUSIC OF RICHARD FAITH

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The music of Richard Faith provides a welcome addition to the teaching and concert repertoire of contemporary American piano music. Faith's piano music may best be described as tonal, with varying concentrations of chromaticism, and frequently contrapuntal textures. Even with such complexities, many of the compositions, including those at the more advanced levels, are quite concise in length.

The purpose of the present study is to make this music more accessible to a broad teaching public. The study contains an annotated guide to the published piano compositions of Richard

Faith, organized according to recommended teaching levels. These teaching levels were determined through careful examination of factors contributing to the relative difficulty of each piece in the following areas: (a) pitch, (b) duration, (c) interpretation. A chart was devised on which data gathered during this review process could be recorded. These data were then utilized in sorting the pieces according to the following selected difficulty levels: (a) Beginning-Intermediate Level, (b) Intermediate Level, (c) Advanced Level, (d) Concert Level. Upon completion of this evaluation and sorting process, a representative sampling of the pieces, with recommended teaching levels, was given to three authorities in the field of piano teaching for verification.

In addition to the annotated guide, the study also contains a biographical outline for the composer, a list of references on the composer's works, and an index to musical and pianistic features listed in the guide. Complete publication information is also given for each piece.

## THE LIFE OF J. ABBIE CLARKE HOGAN KANSAS PIONEER IN MUSIC AND MUSIC EDUCATION

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J. Abbie Clarke Hogan, 1875-1964, was an American pioneer in the field of music and music education. A native of Junction City, Kansas, she became a pupil of renowned violin teachers such as Dr. Joseph Joachim and Andreas Moser in Berlin, Germany and Bernhard Listemann in

Chicago, Illinois. As a performing artist, she played with major symphonies and made numerous concert appearances. As a music educator, she was a leader in the struggle during the early years of the twentieth century to have orchestra become a part of the public school curriculum. She was author of a violin method book and became conductor of her own symphonic ensemble.

The purpose of this study is to reveal and preserve the dreams and accomplishments of this dynamic woman, musician, and music educator and to provide an insight into the musical and cultural climate in America at that time in history. Her life reflects the tremendous obstacles a talented and ambitious young musician faced as a woman. The difficulties she encountered are not unlike those faced by her modern day counterpart.

As a teacher she set forth the highest of standards for her pupils. They were permitted to study only the music of the most respected composers, and mediocrity was not accepted in either substance or performance. She believed that life without music was an empty life, even in the center of a state which, at that time, was better known for its frontier image. She devoted her life to enriching the lives of others with music and musical experiences.

Many of the activities of Mrs. Hogan are recorded in the files of museums and historical societies and in newspapers. Her efforts to establish orchestra as a part of the school curriculum are recorded in the minutes of school board meetings and in the minutes of the Music Supervisors National Conference. Members of her orchestras, her private pupils, acquaintances, and relatives have provided additional information.

The study of the achievements of successful pioneers in American music can only serve to provide inspiration, appreciation, and determination to those who follow them.

## VILLANCICOS BY LUIGI BOCCHERINI: AN EDITION

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The manuscript copy of Villancicos by Luigi Boccherini is presently housed in the Biblioteca National, Madrid, Spain. Villancicos, c. 1783, is the only example of this genre to have been written by Boccherini.

This thesis makes available a performing and scholarly edition of Villancicos prepared from microfilm copies of the parts title Tiple, Alto, Tenor, Basso, Violin 1°, Violin 2°, Viola, Violoncello and Basso. In order to study Boccherini's compositional technique, the text and its divisions are compared with the musical sections as determined by tempi, themes, vocal and instrumental textures.

A historical survey of the villancico includes the etymology of the term, as well as its form and development from the fifteenth to the eighteenth century. The early villancicos were originally a literary form of peasant origin, based on secular subject matter. They eventually developed into a sacred musical form in celebration of the Christmas season.

Boccherini's Villancicos is a continuous work in cantata form, incorporating instrumental introductions, recitatives, solos and choruses

with no formal identification of movements indicated by the composer. There are sections within the work that follow the traditional format of alternating the estribillos (refrains) with the coplas (verses).

A discussion of Boccherini's Villancicos includes: an examination of the text with evidence suggesting that Boccherini is the author; and an analysis of the text in comparison to the music.

Appendix I contains the text and English translation, whereas Appendix II is the edition.

## SOURCES OF EMBELLISHMENT: AN ANNOTATED BIBLIOGRAPHY OF SOURCES IN THE UMKC LIBRARY

Mona Gay Holwick, Master of Music
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When attempting to locate sources which include actual embellished versions of Renaissance, Baroque or Classical compositions in the University of Missouri-Kansas City Library, one is at quite a loss as to the procedure to follow. Because these sources are not indexed in the card catalog under embellishment or ornamentation, it can be quite difficult to locate not only examples, but also treatise, method books and journal articles which may contain information on various aspects of the art of embellishment

The purpose of this thesis is to provide an annotated bibliography of compositions, treatises and method books which include examples, and journal articles which discuss aspects of ornamentation.

Because this study is a bibliography, there are separate chapters for each type of reference including compositions, collections, method books, treatises and journal articles. Sources found which are in a foreign language have been included in the appropriate section. A listing of embellishments covered has been provided under each entry. Also included is any relative information which is not an actual musical example, but rather theoretical discussion.

This bibliography contains nine composition entries, six collections, twenty-nine method books, twelve treatises and thirty-eight journal articles. Both the instrumental and vocal mediums are represented, with examples ranging from embellishment of a simple interval to embellishment of an entire work. Although the emphasis of this study is on actual musical examples, theoretical discussions which will prove helpful to the performer have been included.

## A PEDAGOGICAL STUDY OF NEW ENGLAND FOLK MUSIC

Peter van den Honert, Doctor of Musical Arts
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Continued technological advancement and increased urbanization has eroded the number of areas in this country where folk song is perpetuated in the traditional manner. This decline could ultimately result in the loss of a viable body of music, and an accompanying void in knowlede concerning an aspect of our national heritage. Although folk song transcriptions are readily available for scholarly study, they are removed from those who would listen and enjoy them. This paper presents ten arrangements of folk songs designed to be appealing to a contemporary choral ensemble and audience.

Folk songs are not the product of any one period, but are the cumulative expression of many ages, and represent a given community's values and ideals; because of their oral transmission they are subject to constant transformation in text and tune. They are a complete art form, but differ from cultivated song in their manner of composition and presentation. Folk songs generally fall into one or more of several types: lyric songs, work songs, children's songs, ballads, and religious songs. Regardless of their type, however, folk songs share many common elements and cliches of textual and musical expression.

Because America is a country of many cultures, one cannot identify a single American folk song style. However, there is a region of America, New England, the cultural make-up of which fosters folklore and folk songs. Since it was one of the earliest British settlements in the New World, and since it continued to be one of the major portals through which British settlers passed as they came to this country, New England has a large tradition of Anglo-American folk song.

Songs selected for arrangement are all from New England, and represent an overview of the culture of that area. The arrangements also highlight certain elements of music prominent in the songs for use as a teaching tool during the rehearsal of the songs.

# A STUDY FOR DEVELOPING THE HEAD VOICE TO IMPROVE PITCH SINGING ACCURACY OF ADOLESCENT GIRLS CLASSIFIED AS NON-SINGERS

Donna L. Maddox, Master of Music Education
University of Missouri-Kansas City

This study was designed to examine a methodology of remedial training aimed at developing the head voice to improve pitch singing accuracy of girls between the ages of twelve and fifteen classified as non-singers. Also incorporated into the design was the question of whether the remedial training would be as effective in a large group environment as in a small group environment.

The sample was eighteen seventh and eighth grade girls classified as non-singers as a result of scoring less than 50% accuracy on a screening test measuring individual pitch accuracy. This sample was divided into a large group of twelve and two small groups of three for remedial training.

An experimental pretest-posttest equivalent materials design was used to generate the data. The data was analyzed by a correlated data t-test and an independent data t-test for statistical significance.

Remedial training consisted of twenty fifteen-minute lessons which, because of an alternating day schedule, covered a calendar period of eight weeks.

The remedial training was investigator-constructed and aimed at widening the tessitura through development of the head voice and improvement of tonal memory through aural imagination.

Subjects given this method of remedial training showed significant gains in individual pitch accuracy and melodic contour accuracy as a total group. No significant difference was shown in gain scores between subjects trained in a large group and subjects trained in a small group.

Development of the head voice and expanding the singing voice above the lift plus training in aural imagination may have contributed to gain scores for the total group in both individual pitch accuracy and melodic contour accuracy.

Individual practice on every exercise by subjects in the small group as opposed to individual practice on every fourth exercise by subjects in the large group did not result in a significant difference in gain scores between the two groups.

## A COMPARISON OF SELECTED CHARACTERISTICS OF TWO COMMUNITY CHOIRS IN OKAYAMA, JAPAN, WITH TWO COMMUNITY CHOIRS IN DENVER, COLORADO, U.S.A.

Thomas M. Miyake, Doctor of Musical Arts
University of Missouri-Kansas City

The purpose of this study is to compare selected characteristics of a small Japanese community choir with an American community choir of a similar size, and to compare selected characteristics of a large Japanese community choir with a large American community choir.

The investigator designed a questionnaire for the choir memberships which included the following categories: (a) personal background; (b) educational background; (c) musical background; (d) language background; and (e) personal musical preference.

A Conductor's Interview Format was designed by the investigator which included the following categories: (a) personal background, (b) rehearsal procedures, (c) selection of repertoire, (d) audition procedures, (e) choir's history, (f) choir finance, and (g) concert season.

Returns of 100 questionnaires from the American choirs and 65 questionnaires from the Japanese choirs and responses from the four music directors on questions from the Conductor's Interview Format were received.

Data were analyzed using the chi-square procedure of the *Statistical Package for the Social Science* (SPSS). The 1-2-3 Lotus software was used in processing the data and creating the bar graphs.

The study disclosed significant differences in 3 of 6 categories on the Conductor's Interview Format in both comparisons between the American and Japanese large and small choirs. There was at least one significant difference ($p < .05$) found in all five categories of the Choir Member's Questionnaire.

## EFFECT OF MUSICAL LISTENING AND GUIDED IMAGERY WITH MUSIC ON MOOD OF DEPRESSED PATIENTS

Sharon D. O'Donnell, Masters of Education
University of Missouri-Kansas City

Mood response to music listening and guided imagery with music was the task investigated in this study. Twenty-seven hospitalized adult psychiatric patients, each with a diagnosis of depression, were seen in two sessions. In Session One, subjects listened to one of the three fifteen minute music listening tapes. In Session Two, subjects listened to the same music listening tape with the addition of a guided imagery script. Both sessions were begun with a self-administered measure of state depression (Depression Adjective Checklist) as the pretest and were followed by a second form of the DACL as the posttest. An Analysis of Variance yielded a significant difference for the change from pretest to posttest for all subjects who were in the music listening groups. No significant differences were shown for the guided imagery with music groups nor were any other changes or interactions significant. Future research is indicated for mood response to music listening and guided imagery with music. Behaviors exhibited by subjects during all sessions indicated that greater length and frequency of tapes would elicit results of decreased depression.

## THEORETICAL CONSTRUCTS FOR THE ANALYSIS OF ACOUSTIC DISSONANCE FLUCTUATION

Gregory Danner
Washington University, St. Louis

The main objective of the paper is to examine recent research in acoustical theories of dissonance and to outline methods of applying this research in musical analysis. The study centers on measuring the acoustic dissonance in trichords within a two-octave range and through

five registers (C1-B5). Acoustic dissonance values for the 19,175 trichords within this scope are presented as an appendix.

Part 1 gives the historical foundation for approaching the concept of consonance and dissonance through the science of acoustics. An overview of acoustical dissonance theory from Pythagoras through Helmholtz is presented. Recent scholarship (Hutchinson/Knopoff, 1978) provides the basis for a system of computing acoustic dissonance in complex tone interactions. The acoustic measure of dissonance for trichords is examined at first in purely theoretical terms, with tables of rank order dissonance values and through observing qualitative differences in permutations and voicings of pitch-class sets.

Part 2 presents a model analysis of acoustic dissonance fluctuation in a musical work. The piece chosen in Elliott Carter's _Canon for 3_ (1971). A traditional pitch set analysis of the harmonic structure is followed by two methods of representing the acoustic dissonance fluctuation. Through a grid system the numerical measurement (from the appendix) of each trichord is labeled. Durational values are shown through divisions of the grid. A second analytic technique involves graphing the acoustic dissonance fluctuation underneath the actual music. Here the music itself represents the durational element and the measures of acoustic dissonance are indicated to the second significant decimal place. Observations are made on the structural role of dissonance fluctuation in the model analysis.

Part 3 notes the necessary considerations in extending acoustic dissonance measures to tetrachords, pentads, and hexachords. Tables listing measures for prime form and inversionally distinct tetrachords as well as voicings of the two all-interval tetrachord forms are given. Suggestions on musicological, psychological, and compositional application of the dissonance measures are developed.

## PERFORMANCE ASPECTS OF SELECTED VIOLONCELLO CONCERTI FROM THE PERIOD 1700-1820

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University of Missouri-Kansas City

The purpose of this study was to examine, catalog and clarify the performance aspects of selected eighteenth and early nineteenth-century cello concerti in order to determine the level of technique obtained by the most advanced cellists during the eighteenth century. Since the concerto was the usual display vehicle of the virtuoso during the eighteenth century, it was chosen to study the performance aspects which were actually in use at that time. The results of this study demonstrate that virtually every possible technique was known and used during the last third of the eighteen century, and that cello technique did not lag far behind violin technique as has been thought, but developed more nearly parallel to it.

The research methodology includes analysis of the performance aspects of approximately 126 manuscripts or first edition cello concerti from the period 1700-1820. The research also includes a wide variety of reading material dating from the sixteenth century to the present time, consisting of books, articles, contemporary methods, and iconography.

The first chapter is introductory and discusses the current view of the eighteenth-century cellist, the eighteenth-century methods and their relation to performance, the existence of violoncello virtuosi during the eighteenth century, the violoncello as a solo instrument, the concerto as the vehicle of the virtuoso, and the nature of the eighteenth-century cello. The second chapter outlines the development of the instrumental concerto, and includes a description of the specific concerti that were selected for analysis as well as the composers represented. Chapter Three discusses the multiplicity of clefs in use in cello music during the eighteenth century, and suggests possible origins of the various clef usages. The fourth chapter is concerned with right and left hand technique as represented in the concerti and amplified by the cello methods of the eighteenth century. Chapter Five deals with performance practices, including written matters of interpretation, and the cadenza. The sixth chapter contains a summary and conclusion. The Appendix is comprised of a list of the compositions studied and their location.

## DIMENSIONAL TRADEOFFS IN THE PERCEPTION OF COMPLEX TONE SEQUENCES

Punita Gurpreet Singh
Washington University, St. Louis

Given a rapidly occurring sequence comprising sounds that differ from each other along some dimension, the presented sequence of "different" sounds is often found to be perceptually grouped into sub-sequences or "streams" where such differences are diminished. This study demonstrates the use of "qualitative" dif-

ferences in timbre as providing the factor necessary to initiate this segregation into subgroups.

The "timbral" attribute of the tones within the sequences has been put in "competition" with their "pitch" attribute, in order to compare the tradeoffs between the two cues that take place in dominating the grouped percept. Sequences differing in their "pitch-timbre" layout have been presented to listeners, in order to determine whether they are organized in terms of proximity in "pitch," or similarity in "timbre," and to see if this organization changes in a systematic way with the differently structured sequences.

Having observed the type of interaction that goes on between the timbral and pitch attributes of the tones used, the physical differences between tones are eventually "quantified" in terms of frequency, as this is the only dimension varied in making both "pitch" and "timbre" different. The sequences are then analyzed in terms of their spectral structure, and the differences in spectra related to the type of grouping most often perceived as indicated by the response of the listeners.

The results validate the hypothesis that timbre can serve as a cue to segregate sequences, and indicate that the notion of "pitch" as the dominant factor causing stream segregation, needs to be revised, and viewed in terms of absolute frequency, since the different timbres juxtaposed in this study always shared the same pitch, but differed in the frequency region of the harmonics used in the spectrum. On the basis of such a "fine-structure" analysis of the mapping between stimulus and response, it is suggested that the grouping of the complex tone sequences used was based upon tradeoffs between both the facets of the frequency domain employed: (a) the "absolute" position of the spectrum along the frequency axis, which was varied to provide the timbral "distances" between sounds, and (b) the "relative spacing or "width" between harmonics of the spectrum, which was varied to provide differences in "pitch" between sounds. Furthermore, the change in response (grouping) seemed to change in a systematic fashion with the change in sequence structure. On the basis of this observation, and the finding of a "common ratio" between the spectral "distance" and spectral "width" of the sequence tones, it is speculated that a "threshold value for the spectral "distance" between tones that causes them to segregate from each other might exist, comparable to similar threshold values assumed for differences in frequency in pure tone sequences. Given the crucial role of "context" however, it is acknowledged that other interactions due to changed circumstances of sequence structure, may not allow any general claims to be made.

## THE TIME OF MUSIC TOWARD FOUNDATIONS FOR A GENERAL THEORY OF MUSIC

Richard Justin
Washington University, St. Louis

This study proposes that the perception of the musical work creates a kind of experiential time and that it is through the consideration of this temporal process that music theory can develop general concepts with which to evaluate the results of its analytic techniques as well as to evolve new ways to think about musical structure.

The text is divided into four sections. The first, Chapter One, introduces the basic approach to the idea of the musical work as the perceived structure of a performance, the role of intentionality in that perception, and the consideration of music as process. This section also examines a description of experiential time, the definition of the idea of rhythm as it will be used in the study, and a discussion of musical time. It is proposed that the elements of musical style and compositional technique create autonomous temporal structures and that rhythm is the basic cohesive agent in those structures.

Section Two consists of three chapters. Chapter Two is the analysis of the first movement of the Beethoven Piano Sonata opus 10, number 3, including an introduction that deals with certain problems in the analytic vocabulary and the large-scale rhythmic structure of the movement. The detailed analysis is keyed to the idea of structure as a rhythmic process. In Chapter Three, certain concepts drawn from the history of science, referred to as "Newtonian" concepts, are related to aspects of 18th- and 19th-century music. The fourth chapter returns to the first movement of the Beethoven Piano Sonata discussed in Chapter Two, summarizing and extending the scope of the earlier analysis through the application of the ideas developed in Chapter Three.

The third section considers certain pre-and post-Newtonian musical styles. Chapter Five is devoted primarily to the analysis of one 13th-century motet. It is followed by a brief chapter introducing ideas from 20th-century science and visual arts that serve as a preface to the seventh and eighth chapters which discuss aspects of 20th-century music.

The fourth section, Chapter Nine, summarizes certain key concepts introduced or described in the study. From this amalgamation of ideas, certain guidelines are outlined, and the contribution these ideas might make to music theory is discussed.

# MISSOURI JOURNAL OF RESEARCH IN MUSIC EDUCATION

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It is with deep regret that we note the death of Jack Stephenson, September 2, 1987. He was editor of the *Missouri Journal of Research in Music Education* for the years 1977-1987 and had been a member of the editorial board since 1971.

# MISSOURI JOURNAL OF RESEARCH IN MUSIC EDUCATION

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3. Articles should be typewritten with double spacing on 8-1/2 x 11 paper.

4. Manuscript style should follow the *Publication Manual of the American Psychological Association* (3rd ed., 1983), which can be purchased from the American Psychological Association, 1200 Seventeenth St., NW, Washington, D.C. 20036.

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## PREFACE

The *Missouri Journal of Research in Music Education*, published by the Missouri Music Educators Association, is devoted to the needs and interests of teachers of music in Missouri and the nation. This issue, Volume V, Number 4, is the twenty-fourth.

The members of the editorial committee are grateful to those readers who have written suggestions concerning the content of past issues and request that criticisms and suggestions again be sent to the editor concerning the content of this issue. We strive for a reasonable balance among music theory, history, philosophy, aesthetics and pedagogy.

We express our deep gratitude to the Missouri Music Educators Association for their financial support to make it possible to continue to publish the *Missouri Journal of Research in Music Education*.

The Editorial Board

# COMPARISON OF MUSIC TEACHING SELF-EVALUATIONS BEFORE AND AFTER VIDEOTAPE FEEDBACK

Wendy L. Sims
University of Missouri-Columbia

As advancements in modern technology have led to lower prices and increased portability of videotape equipment, video technology has become increasingly accessible for use in educational/therapeutic settings. As a result, the use of videotape as a feedback mechanism for pre-service music teachers/therapists as well as student teachers and interns seems to have become a more practical and frequent occurrence.

Some of the advantages attributed to videotape feedback as compared with "live" observation include videotape's permanence, objectivity, superiority to memory, and efficiency with respect to the use of teacher/supervisor time (Sims, 1985). The use of videotape also allows the students to view themselves and develop self-assessment skills, skills important to teachers and therapists, for whom self-evaluation is the primary means of day-to-day feedback (Irvine, 1983). Borg *et al.* (1970), found that research generally supported the conclusion that videotape self-evaluation of micro-teaching was superior to supervisor feedback in improving teaching. Feedback from personal assessment of videotaped teaching has also been found to lead to improved self-confidence (Peck, 1971), a characteristic identified as being related to successful teaching (Hall, 1976; He Sung, 1982).

The use of videotape can also be an effective means of individualizing and personalizing music instruction (Yarbrough, Wapnick & Kelly, 1979). As an instructional tool, videotape feedback in conjunction with observation forms and checklists has been used to improve music teaching and conducting skills (Furman, 1984; Killian, 1981; Moore, 1976; Yarbrough, Wapnick & Kelly, 1979), and to enhance student acquisition of music therapy competencies (Alley, 1980 & 1982; Hanser & Furman, 1980; Madsen & Alley, 1979; Madsen & Yarbrough, 1980).

Researchers interested in how video or audio feedback functions for music education and therapy students have found widely varying levels of correspondence between students' self-ratings and instructor evaluations of taped teaching or therapy sessions (Alley, 1980; Doane, 1983; Furman, 1984; Greenfield, 1978; Prickett, 1983; Sims, 1985; Yarbrough, Wapnick & Kelly, 1979). It is likely that some of these discrepancies are the result of the different evaluation forms or procedures uses (Furman, 1984; Sims, 1985).

Sims (1985) also found peer feedback to be a variable related to discrepant student/instructor reliability. Qualitative-type self-evaluations of videotaped music teaching activities which were completed by the subjects alone were more reliable than evaluations completed by subjects with the assistance of a peer, although reviews completed with a peer tended to be more positive.

If self-evaluation is to be an effective teaching tool, student self-assessment must be accurate and consistent with the assessment of instructors and supervisors. While several variables which affect the development of student self-evaluation skills and student/instructor reliability have been identified, the investigation of additional variables still seems necessary to provide more information with which to address this issue.

One question which does not yet seem to have been addressed in the literature is the degree to which students' self-evaluations of a teaching experience are changed by viewing themselves on videotape. While it may be reasonable to assume that perceptions will be more accurate after the viewing experience, this study was designed to examine the magnitude of change in order to more fully understand the videotape self-review process, and possible advantages or disadvantages associated with it. Another question being investigated is the direction of any change which may occur. As mentioned above, self-concept seems to be a factor in achieving success in teaching. Of interest in the present investigation was whether students' perceptions of their teaching experience would be more or less positive as a result of viewing themselves on videotape. The effect of video feedback on student/instructor reliability was also examined.

## Method

The subjects for this study ($N$ = 41) were elementary or early childhood education majors enrolled in two sections of an elementary music education methods course. The course is designed to teach competencies required for leading and teaching musical activities to children; specific music skills which are the same as those required by music educators and therapists, and basic teaching skills which should transfer to any subject matter.

One of the course requirements was for students to choose and prepare a song to teach for the class using rote teaching techniques, with the stipulations that it be a song unfamiliar to the students' peers and that either piano, recorder, or guitar be used in the teaching process. Each of these three- to five-minute teaching sessions was recorded on videotape, and provided the stimulus for self-evaluation used in this study. Several weeks prior to this activity, each student had taught an unfamiliar, unaccompanied rote song to the class. This first experience had also been videotaped, and students had viewed their performance and completed a self-evaluation form. This initial experience was designed so that the "cosmetic effect," the tendency for subjects who are viewing themselves for the first time to focus on their physical appearance and mannerisms rather than teaching procedures and characteristics (Allen & Ryan, 1969), would be alleviated when subjects viewed and evalauted themselves as a part of the procedures used for the research task. It also allowed the students to overcome their initial nervousness about both teaching in front of their peers and being video tape recorded.

Immediately following the teaching experience, without having viewed the videotape, each subject completed and turned in a self-evaluation using the form provided (see Figure 1). The evaluation form items consisted of teaching behaviors and music skills identified in the literature as competencies related to successful music teaching, and is the same form that was developed for use in a previous study by Sims (1985). Students had been instructed in the use of the form during the class period preceding the teaching activity. Within the next week, students viewed the videotape of their performance independently, with the opportunity for replaying the tape as often as they wished or needed, and again completed the self-evaluation form. No feedback of any kind was given by the instructor until the second evaluation had been completed. The instructor independently viewed the videotapes and completed the evaluation form for each subject.

Table 1. Sample Evaluation Form

SONG 3 EVALUATION

Include comments if you wish

1. Starting pitch played correctly
   Yes Sometimes No
2. Matched starting pitch when singing
   Yes Sometimes No
3. Used starting pitches consistently
   Yes No
4. Pitch level of song (for group)
   Too high Ok Too low
5. Clear cues for group to start or stop
   Excellent Good Ok Fair Poor
6. Gave clear instructions
   E G O F P
7. Size of teaching steps
   Too large Ok Too small
8. Logical teaching sequence
   E G O F P
9. Pacing
   Too fast Ok Too slow
10. Accurate pitches/chords
    Yes Sometimes No
11. Accurate rhythm and/or beat
    Yes Sometimes No
12. Played without hesitation or starting over
    Yes Sometimes No
13. If made a mistake, continued smoothly
    Yes Sometimes No NA
14. If made mistakes, did not show with face or body
    Yes Sometimes No NA

Figure 1. Sample evaluation form

Name ______________________________

Partner ___________________________

15. Playing volume

Too loud Ok Too Soft

16. Spoke clearly and understandably

E G O F P

17. Expressive speaking voice

E G O F P

18. Pleasant facial expression

E G O F P

19. Enthusiasm

E G O F P

20. Leadership

E G O F P

21. Eye contact while speaking

E G O F P

22. Eye contact while playing

E G O F P

23. Eye contact throughout lesson

E G O F P

24. Estimated % of time with eye contact

__________

25. Appropriateness of song choice

E G O F P

26. Students achieved independence

Yes Almost No

27. Appeared well prepared

E G O F P

To help control for a possible confounding of the videotape viewing with the effects of time alone, another teaching activity which was scheduled for a few weeks later in the semester was used for comparison as a control condition. For the control activity, students taught a five- to six-minute lesson based on a musical concept, and completed evaluations immediately after teaching and again several days to one week later, with no videotape or teacher feedback occurring prior to the second evaluation. The self-evaluation form used was similar to, although not the same as, the form used for the videotaped experience. Since this study was designed as "action research," or research which fits within the framework of regular classroom procedures, it was not possible for the class to repeat the experimental teaching situation, but it was felt that the control teaching procedure approximated the experimental activity sufficiently for comparisons to be drawn.

## Results

Comparisons of the experimental evaluations were made in several ways. Each subject's pre-video feedback and post-video feedback form was compared, and the instructor's form was compared to both evaluations submitted by each student. The comparison procedure consisted of counting the number of "agreements," defined as identical responses to individual items, and "disagreements," defined as any discrepant items. For item 24, which required a percentage response, agreement was defined as within plus or minus five percentage points. In addition, the number of items on which the students rated themselves higher, lower, or the same after viewing the videotape was tabulated.

Results of the comparison of student pre- and post-video evaluations indicated that an average of 4.49 items, or 16.7% of the total responses were rated higher after videotape feedback than they had been before video feedback, 3.22, or 11.98% were rated lower from pre- to post-viewing, and 19.17, or 71.32%, were rated the same both before and after students had viewed the videotape. In examining the direction of change in self-evaluation before and after video feedback, 23 of the subjects responded with a larger number of items for which self-evaluations were more positive after viewing the videotape, 15 subjects responded with a larger number of items for which self-evaluations were less positive after viewing the videotape, and 3 subjects' responses did not change from pre- to post-viewing.

The two evaluation forms completed as a control activity were compared in a similar manner to the experimental evaluations. Results indicated that of the 40 subjects completing this set of evaluations, 15 had a larger number of items for which responses were more positive after time, 21 had a larger number of items for which responses were less positive after time, while for 4 subjects responses did not change.

To examine agreement between subjects and their instructor, each of the two evaluation forms completed by the subjects as part of the experimental activity was compared to the form completed by the instructor. Instructor/subject agreement averaged 15.75 items (58%) before subjects viewed the videotape, with mean agreement after videotape feedback of 17.22 items (64%). Results of a dependent $t$ test comparing pre- and post-video agreement with the instructor indicated that this difference was significant, $t(40) = 3.59$, $p < .05$.

## Discussion

A larger number of subjects rated their teaching performance higher after viewing their performance on videotape as compared to ratings completed immediately after the teaching experience, when the evaluation was completed prior to video feedback. Self-evaluations completed over a short period of time during which there was no external feedback, however, tended to be lower. In observing the students as they returned to their seats after having completed their teaching, it appeared as if many tended to remember and dwell on the negative aspects even when there had been many successful aspects to the performance. It is likely that the videotape feedback functioned as a memory device, whereby students were reminded of the positive things they had done and thus were able to get a better perspective on the entire experience, resulting in an increased self-assessment of their teaching skills.

The more positive self-evaluations after videotape feedback seem also to be more accurate than those completed before feedback, if accuracy is defined as agreement with an expert, in this case the instructor. While the moderate to low levels of agreement found are consistent with previous research for qualitative-type forms, videotape feedback appears to be a successful means of effecting higher student/instructor reliability than when the student uses no external feedback.

It might be concluded, then, that the use of videotape feedback for micro-teaching experiences can lead to a more positive self-image as well as more accurate self-evaluation for students practicing music teaching skills. Both of these are important aspects of self-evaluation for students to acquire, to the extent that a positive self-image is related to successful teaching (Hall, 1976; He Sung, 1982), and given that teachers, as well as therapists, must be able to provide themselves with their own feedback the majority of the time (Irvine, 1983). The data reported here add to the growing evidence that the use of videotape to provide feedback to students who are beginning to acquire skills necessary for teaching and therapy can be a useful, important part of the learning process. The value of using videotape feedback may also have implications for in-service music teachers or therapists and supervisors, as well as university and school or institutional personnel involved in student teaching or intern supervision, as videotape feedback may function in a similarly positive and beneficial manner for teachers or therapists with varying levels of experience. Further research with these populations would be a useful addition to the research literature.

The findings of this study are consistent with the previous literature which suggests that the use of videotape for teaching feedback is a valuable technique. When considered in conjunction with the other reasons that the use of videotape feedback seems to be advantageous, as identified above, this study may provide additional support for instructors or supervisors who need to justify the expense of obtaining and using video equipment in the training of pre-service, and perhaps in-service, music teachers and therapists.

## References

Allen, D. & Ryan, K. (1969). Microteaching. Reading, MA: Addison-Wesley.

Alley, J. M. (1980). The effect of self-analysis of videotapes on selected competencies of music therapy majors. *Journal of Music Therapy*, *17*, 113-132.

Alley, J. M. (1982). The effect of videotape analysis on music therapy competencies: an oberservation of simulated and clinical activities. *Journal of Music Therapy*, *19*, 141-160.

Borg, W. R., Kelley, M. L., Langer, P., & Gall, M. (1970). *A microteaching approach to teacher education*. London: Collier-Macmillan.

Doane, C. P. (1983). The identification and assessment of selected characteristics of prospective music educators. *Contributions to Music Education*, No. 10, 9-18.

Furman, C. E. (1985). *Behavior checklists and videotapes versus standard instructor feedback in the development of music teaching competency*. *Dissertation Abstracts International*, 45, 2793A. (University Microfilms No. DER 84-27300)

Greenfield, D. G. (1978). Evaluation of music therapy practicum competencies: comparisons of self- and instructor ratings of videotapes. *Journal of Music Therapy*, *15*, 15-20.

Hall, G. E. & Jones, H. L. (1976). *Competency-based education: a process for the improvement of education*. New Jersey: Prentice-Hall.

Hanser, S. B. & Furman, C. E. (1980). The effect of videotape-based feedback vs. field-based feedback on the development of applied clinical skills. *Journal of Music Therapy*, *17*, 103-112.

He Sung, K. (1982). The effects of differentially structured lesson plans on the elementary general music teaching behaviors of sophomore music education students. Paper presented at the National Symposium for Research in Music Behavior, Tallahassee, FL.

Irvine, J. J. (1983). The accuracy of pre-service teachers' assessment of their classroom behaviors. *Journal of Research and Development in Education*, *17*, 25-31.

Killian, J. N. (1981). Effect of instructions and feedback on music teaching skills. *Journal of Music Therapy*, *18*, 166-180.

Madsen, C. K. & Alley, J. M. (1979). The effect of reinforcement on attentiveness: a comparison of behaviorally trained music therapists and other professionals with implications for competency-based academic preparation. *Journal of Music Therapy*, *16*, 70-82.

Moore, R. S. (1976). The effects of videotaped feedback and self-evaluation forms on teaching skills, musicianship, and creativity of prospective elementary teachers. *Council for Research in Music Education*, *47*, 1-7.

Peck, R. F. (1971). Promoting self-disciplined learning: or researchable revolution. In R. O. Smith (Ed.), *Research in teacher education*. New Jersey: Prentice-Hall.

Prickett, C. F. (1984). *The effect of self-monitoring on positive comments given by music therapy students coaching peers*. *Dissertation Abstracts International*, *44*, 2080A. (University Microfilm No. DEQ-83-25683)

Sims, W. L. (1985). Effects of peer feedback on pre-service teachers' self-evaluation of videotaped teaching. Florida Journal of Teacher Education, 115-124.

Yarbrough, C., Wapnick, J. & Kelly, R. (1979). Effect of videotape feedback on performance, verbalization, and attitude of beginning conductors. Journal of Research in Music Education, 27, 103-112.

# A SURVEY OF INSTRUMENTAL MUSIC SCHEDULING STATUS IN PUBLIC SCHOOLS OF SOUTHEAST MISSOURI

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The purpose of this study was to gather information concerning the instrumental music scheduling practices in Southeast Missouri, to identify specific scheduling problems, and to provide information about the school grade structure, music personnel, and music facilities. A forty-two item questionnaire covering school grade structure, faculty, facilities, music program, instrumental music program, and instrumental music scheduling was developed by myself.

A total of one hundred public schools throughout Southeast Missouri State University were surveyed. The survey was conducted among the instrumental music teachers in those schools through the mail during November 1984, with follow-up questionnaires in December and January to those who did not respond to the first and/or second questionnaire. A total of eighty-nine respondents returned the completed questionnaire. The results were hand tabulated and frequencies were determined for each item. Percentages were calculated from frequency tabulation to facilitate reporting of the information. The six major areas of the questionnaire served as categories through which the obtained information was interpreted. Three respondents reported that their school had no instrumental music programs. In addition, two questionnaires were removed from consideration due to inconsistent reporting. This resulted in tabulation of data bsed upon information supplied by eighty-four respondents of the one hundred schools surveyed.

Schools in Missouri are classified by the Missouri State High School Activities Association (MSHSAA) according to enrollment in grades nine, ten, eleven, and twelve as reported on the current annual school membership form filed yearly. Classifications are as follow: 4A (1001 and above); 3A (401-1000); 2A (201-400); and, 1A (200 and under). At the time of the survey ten of the Southeast Missouri schools were classified 4A, twenty-seven were 3A, twenty-two were 2A, and twenty-five were 1A.

The majority of Class 1A schools employed only one instrumental music instructor, with 1.04 teachers per system. Although more Class 2A schools employed more than one instrumental music teacher, with a mean of 1.16 per system, the majority employed only one. A significant increase in the number of instrumental music teachers per school was evident in Class 3A systems, with a mean of 1.5 instrumental music teachers per system. The number of instrumental music teachers in Class 4A schools ranged from one to five, with a mean of 2.4 per system. The data clearly indicate that the number of instrumental music teachers in the school system increases with the size of the school system.

## Table 1

### Instrumental Music Instructors Employed in School Systems

| Number of Teachers In System | MSHSAA School Classifications | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1A | | 2A | | 3A | | 4A | |
| | N | Percentage | N | Percentage | N | Percentage | N | Percentage |
| 1 | 24 | 40 | 18 | 30 | 13 | 22 | 3 | 5 |
| 2 | 1 | 5 | 4 | 18 | 11 | 58 | 3 | 16 |
| 3 | | | | | 2 | 50 | 2 | 50 |
| 4 | | | | | 1 | 50 | 1 | 50 |
| 5 | | | | | | | 1 | 100 |

The majority of Class 1A and 2A schools employed only one teacher; therefore, assignment of responsibilities in the instrumental music program by any one factor does not obtain. In Class 3A and 4A schools employing more than one instrumental music teacher, assignment of responsibilities was by grade level, instrument specialization, or a combination of these factors. Obviously, the larger school systems which employed more than one instrumental music teacher exercised the privilege of assigning responsibilities by factors other than grade level. In those systems where responsibilities were assigned by instrument specialization, the students enjoyed a great advantage in instruction.

Only sixty-seven of the one hundred twelve instrumental music teachers reported in the survey indicated area specialization. Of those sixty-seven, fifty-five were instrumental music specialists. I believed the number of responses to this question was insufficient to evaluate its import.

In the 1A and 2A Class school the majority of teachers had completed only the Bachelor degree level. In Class 3A schools the numbers of instructors who had completed the Bachelor level and those who had completed the Master level were nearly equal. This was also true in the 4A schools. This evidence clearly indicates that proportionately more instrumental music teachers in Classes 3A and 4A schools had completed the Master level than in Classes 1A and 2A. The data might also suggest that Class 3A and Class 4A school systems have required or encouraged completion of the Master level. The two respondents holding Doctoral degrees were in Class 1A and Class 3A schools.

## Table 2

## Degrees of Instrumental Music Teachers by School Classification

| Degrees | MSHSAA School Classifications | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1A<br>(25)* | | 2A<br>(23)* | | 3A<br>(42)* | | 4A<br>(22)* | |
| | N | Percentage | N | Percentage | N | Percentage | N | Percentage |
| Bachelor Level | 17 | 68 | 19 | 83 | 18 | 43 | 12 | 55 |
| Master Level Not Completed | 1 | 4 | 1 | 4 | 1 | 2 | | |
| Master Level Completed | 6 | 24 | 2 | 9 | 22 | 53 | 10 | 45 |
| Special Level Completed | | | 1 | 4 | | | | |
| Doctoral Level Completed | 1 | 4 | | | 1 | 2 | | |

*Number of teachers for whom degrees were reported.

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Since certification was reported for only forty-one of the one hundred twenty-three instrumental music tachers in the survey, any attempt to describe the certifications of instrumental music teachers in Southeast Missouri might well be far from accurate. The largest percentage of the forty-one reported had vocal and instrumental certification, kindergarten through twelve. This condition might be expected in a largely rural area such as Southeast Missouri where seventy-one percent of the schools employed only one instrumental music teacher. This teacher might also have been teaching vocal music. Therefore, dual certification was necessary.

Table 3

Certification of Instrumental Music Teachers

| Area Certified | N (41) | Percentage |
|---|---|---|
| Vocal and Instrumental K-12 | 31 | 76 |
| Instrumental K-12 | 5 | 12 |
| Instrumental K-12 with Temporary Vocal | 2 | 5 |
| Music K-12 | 1 | 2 |
| K-12 | 1 | 2 |
| 6-12 | 1 | 2 |

The next section dealt with facilities for instrumental music instruction in each designated school level where instrumental music was offered, facilities for individual practice during the day, whether the instrumental music facilities were shared by other classes, and transportation mode(s) in school systems where facilities were provided on a different campus.

Schools in the 1A classification had a higher percentage of facilities available for instrumental music instruction at the Beginning Band level. Students in the 4A classification had a higher percentage of facilities available for Intermediate Band. Schools in the 3A classification had a higher percentage of facilities available for Advanced Band. With a mean of sixty-six percent, schools in the 3A classification had more facilities available in the entire band program, beginning through advanced levels.

Table 4

Facilities Available for Instrumental Music

| Band Level | MSHSAA School Classifications | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1A | | 2A | | 3A | | 4A | |
| | N | Percentage | N | Percentage | N | Percentage | N | Percentage |
| Beginning Band | 13 | 52 | 3 | 14 | 10 | 37 | 2 | 20 |
| Intermediate Band | 12 | 48 | 12 | 55 | 19 | 70 | 8 | 80 |
| Advanced Band | 17 | 68 | 18 | 82 | 25 | 93 | 8 | 80 |

In all school classifications the largest percentage of instrumental music programs shared facilities with vocal music. Instrumental music facilities in Class 2A schools were shared with more classes or were conducted in more non-traditional music facilities than in any other school classification. The lowest percentage of conflict was in Class 3A schools.

Table 5

Shared Instrumental Music Facilities According to School Classification

| Shared Facilities | MSHSAA School Classification | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1A | | 2A | | 3A | | 4A | |
| | N | Percentage | N | Percentage | N | Percentage | N | Percentage |
| Vocal Music | 11 | 44 | 17 | 77 | 12 | 44 | 5 | 50 |
| General Music | 2 | 8 | 4 | 18 | 6 | 22 | 2 | 20 |
| Music Appreciation | 3 | 12 | 5 | 23 | 0 | | 0 | |
| Regular Classroom | 1 | 4 | 0 | | 0 | | 0 | |
| Art | 0 | | 1 | 5 | 0 | | 0 | |
| Music Fundamentals | 0 | | 1 | 5 | 0 | | 0 | |
| Guitar Class | 0 | | 0 | | 0 | | 1 | 10 |
| Vocational Agriculture | 0 | | 0 | | 1 | 4 | 0 | |
| Stage | 3 | 12 | 1 | 5 | 0 | | 0 | |
| Gym | 3 | 12 | 1 | 5 | 0 | | 1 | 10 |
| Cafeteria | 1 | 4 | 0 | | 1 | 4 | 0 | |

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Very high percentages of schools in all size classifications offered other music classes. Strangely enough, one hundred percent of Class 1A and Class 2A schools and ninety-six percent of Class 3A schools offered other music classes. But, only ninety percent of Class 4A schools offered other music classes. These data contradict an assumption that more music offerings would be available in larger schools. The three music classes offered in all school classifications were, in descending order of frequency, vocal music, general music and music appreciation.

Table 6

Other Music Classes Offered in the School Structure Designations

| Classes Offered | Elementary (84) | | Middle School (33) | | Junior High (57) | | High School/ Senior High (84) | |
|---|---|---|---|---|---|---|---|---|
| | N | Percentage | N | Percentage | N | Percentage | N | Percentage |
| General Music | 47 | 56 | 19 | 58 | 26 | 46 | 2 | 2 |
| Vocal Music | 18 | 21 | 21 | 64 | 41 | 72 | 67 | 80 |
| Suzuki | 1 | 1 | | | | | | |
| Tonette | 1 | 1 | | | | | | |
| Recorder | | | 1 | 3 | | | | |
| Music Appreciation | 1 | 1 | | | 4 | 7 | 22 | 26 |
| Music History | | | | | | | 4 | 5 |
| Music Education | | | | | | | 1 | 1 |
| Piano | | | | | | | 1 | 1 |
| Fine Arts | | | | | | | 1 | 1 |

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The full band instructional mode was employed at all levels by a majority (mean = 67%) of schools in all classifications. At the beginning level in all school classifications the most commonly employed mode of instruction was full band, followed by small heterogeneous classes. Small heterogeneous classes with full band and sectional lessons with full band were the next most common modes of instruction. At the intermediate level in all school classifications the most commonly employed mode of instruction was small heterogeneous classes, followed by small heterogeneous classes with full band. At the advanced level no instructional mode was most commonly employed. In fact, sectional lessons with full band were employed in only three Class 3A schools and one Class 4A school; individual lessons with full band were employed in only one Class 1A school and one Class 3A school; and, individual lessons with sectoinal lessons and full band were employed in only one Class 1A school. This means that in ninety-two percent of the schools in Southeast Missouri, the advanced band programs were offered only through the full band instructional mode without any supplemental instruction.

Table 7

Modes of Instruction of Instrumental Music in Twenty-Five Class 1A School

| Modes of Instruction | Beginning Band |  | Intermediate Band |  | Advanced Band |  |
|---|---|---|---|---|---|---|
|  | N | Percentage | N | Percentage | N | Percentage |
| Full Band | 10 | 40 | 16 | 64 | 21 | 84 |
| Small Heterogeneous Classes and Full Band | 5 | 20 | 2 | 8 |  |  |
| Small Heterogeneous Classes | 2 | 8 | 2 | 8 |  |  |
| Sectional Lessons and Full Band | 2 | 8 |  |  |  |  |
| Individual Lessons and Full Band | 2 | 8 | 1 | 4 | 2 | 8 |
| Individual Lessons, Sectional Lessons and Full Band | 2 | 8 | 1 | 4 | 1 | 4 |
| Small Homogeneous Classes and Full Band | 1 | 4 |  |  |  |  |
| Sectional Lessons | 1 | 4 |  |  |  |  |

## Table 8

### Modes of Instruction of Instrumental Music in Twenty-Two Class 2A Schools

| Modes of Instruction | Beginning Band | | Intermediate Band | | Advanced Band | |
|---|---|---|---|---|---|---|
| | N | Percentage | N | Percentage | N | Percentage |
| Full Band | 12 | 55 | 22 | 100 | 22 | 100 |
| Small Heterogeneous Classes | 6 | 27 | | | | |
| Small Homogeneous Classes | 2 | 9 | | | | |
| Small Heterogeneous Classes and Full Band | 1 | 5 | 1 | | | |
| Individual Lessons and Full Band | 1 | 5 | | | | |
| Sectional Lessons and Full Band | 1 | 5 | | | | |
| Sectional Lessons | 1 | 5 | | | | |

Table 9

Modes of Instruction of Instrumental Music in Twenty-Seven Class 3A Schools

| Modes of Instruction | Beginning Band | | Intermediate Band | | Advanced Band | |
|---|---|---|---|---|---|---|
| | N | Percentage | N | Percentage | N | Percentage |
| Full Band | 11 | 41 | 19 | 70 | 20 | 74 |
| Small Homogeneous Classes | 4 | 15 | 1 | 4 | | |
| Small Heterogeneous Classes | 4 | 15 | | | | |
| Sectional Lessons and Full Band | 2 | 7 | 3 | 11 | 5 | 19 |
| Sectional Lessons | 2 | 7 | | | | |
| Small Homogeneous Classes, Small Heterogeneous Classes and Sectional Lessons | 1 | 4 | 1 | 4 | | |
| Small Homogeneous Classes, Small Heterogeneous Classes, Sectional Lessons, and Full Band | 1 | 4 | | | | |
| Small Heterogeneous Classes and Full Band | 1 | 4 | 2 | 7 | | |
| Individual Lessons and Full Band | | | | | 1 | 4 |

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Table 10

Modes of Instruction of Instrumental Music in Ten

Class 4A Schools

| Modes of Instruction | Beginning Band |  | Intermediate Band |  | Advanced Band |  |
|---|---|---|---|---|---|---|
|  | N | Percentage | N | Percentage | N | Percentage |
| Full Band | 4 | 40 | 6 | 60 | 9 | 90 |
| Small Heterogeneous Classes | 2 | 20 |  |  |  |  |
| Sectional Lessons and Full Band | 1 | 10 | 2 | 20 | 1 | 10 |
| Sectional Lessons | 1 | 10 | 1 | 10 |  |  |
| Small Homogeneous Classes | 1 | 10 |  |  |  |  |
| Small Heterogeneous Classes |  |  | 1 | 10 |  |  |
| Small Homogeneous Classes and Full Band | 1 | 10 |  |  |  |  |

405

The next section of the survey dealt with the many parameters of instrumental music scheduling: The role(s) of the instrumental music instructor(s) in the scheduling process, the availability of the instrumental music teacher(s) for the instrumental music program during the day, the effects of school transportation, the limitations imposed by extracurricular activities, the conflicts with academic courses, the time spent by the instrumental music instructor(s) with students outside regular school time, and provisions for other instrumental ensembles in the instrumental music program.

In fifty-six of the eighty-four schools reported in the survey only sixty-seven percent of the instrumental music teachers were available during the day primarily for the instrumental music program. Sixteen percent of the teachers also taught vocal music. The remaining seventeen percent were not available during the day primarily for the instrumental music program due to a number of different reasons which included teaching non-music classes and monitoring study halls. This might be explained by the inability of administrators in small, rural school systems to justify full-time music teachers in school budgets. It might also indicate that music is not considered by some administrators and communities to be important enough in the school curriculum to justify and to afford full-time music teachers.

Forty-six percent of all respondents reported numerous extracurricular activities which limited the time for instrumental music in the school curriculum.

Fifty-five percent of these respondents reporting limitation of time for instrumental music indicated that the greatest conflict was with sports, followed by clubs, drama, cheerleading, chorus, and others. On the assumptions that sports activities meet after the school day, this response is difficult to understand. Only six (7%) respondents indicated that full band met outside regular school time. If the remaining seventy-eight instrumental music teachers met full band during school hours, and sports activities met after school hours, a question arises: how could sports conflict with instrumental music in any schools other than the six? Two explanations can be offered:

1) A small school system might be supporting a band program and a sports program by allowing students to particiapte in both. A well known condition is that students are rarely excused from sports for music programs, but more often are excused from the music program for sports participation.

2) If the full band rehearsal is scheduled during the last period of the school day, athletes who participate in band must often be excused to ready themselves for or to be transported to an athletic event which begins after school hours.

### Table 11

### Extracurricular Activities Limiting Time For Instrumental Music in Class 1A-4A Schools

| | MSHSAA School Classifications | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1A (25) | | 2A (22) | | 3A (27) | | 4A (10) | |
| Activity | N | Percentage | N | Percentage | N | Percentage | N | Percentage |
| Sports | 12 | 48 | 7 | 32 | 12 | 44 | 4 | 40 |
| Clubs | 2 | 8 | | | 3 | 11 | 2 | 20 |
| Drama | | | 1 | 5 | 2 | 7 | 1 | 10 |
| Cheerleading | 3 | 12 | | | 1 | 3 | 1 | 10 |
| Chorus | | | | | 2 | 7 | | |
| Yearbook | 1 | 4 | | | | | | |
| Newspaper | 1 | 4 | | | | | | |
| Forensics | | | | | 1 | 3 | | |
| Student Government | | | | | 1 | 3 | | |
| Vocational Technical School | 1 | 4 | | | | | | |

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Sixty-two percent of the respondents reported that conflicts existed between academic courses and instrumental music in the school schedule. Percentages equal more than one hundred percent, because the respondents were asked to check all responses that apply.

Academic classes conflicting with the instrumental music program were, in descending order, science, math, English, driver education, and others. In fact, many of what one would consider an inclusive list of academic courses in a representative curriculum were mentioned by more than one respondent. The only explanation for these conflicts is that a certain hour of the day was not reserved by the administration for instrumental music, specifically the full band ensemble. Furthermore, an assumption can be made that none of the fifty-two respondents to this question was conducting an instrumental music program which incorporated rotation scheduling. An unfortunate result was that students and parents who invested time and money in instrumental music instruction were forced to attend to academic matters without choice in rather inflexible schedules.

## Table 12

## Academic Classes Conflicting with the Instrumental Music Program in Class 1A-4A Schools

| | MSHSAA School Classifications | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1A (25) | | 2A (22) | | 3A (27) | | 4A (10) | |
| Classes | N | Percentage | N | Percentage | N | Percentage | N | Percentage |
| Science | 2 | 8 | 4 | 18 | 10 | 37 | 4 | 40 |
| Math | 3 | 12 | 3 | 14 | 6 | 22 | 3 | 30 |
| Graduation Requirements | 3 | 12 | 1 | 5 | 6 | 22 | 2 | 20 |
| English | 2 | 8 | 2 | 9 | 4 | 15 | 1 | 10 |
| Driver Education | 2 | 8 | 3 | 14 | 2 | 7 | 1 | 10 |
| Foreign Language | 2 | 8 | 3 | 14 | 2 | 7 | | |
| Business | 2 | 8 | 2 | 9 | 1 | 3 | | |
| Computer Classes | 4 | 16 | | | 4 | 15 | | |
| Mechanics | | | | | 2 | 7 | 2 | 20 |
| History | 1 | 4 | 1 | 5 | | | | |
| Vocational Agriculture | 1 | 4 | | | 1 | 3 | | |
| Contemporary Issues | | | | | 1 | 3 | | |
| Psychology | | | | | 1 | 3 | | |

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The marching band program in the majority of Southeast Missouri schools included grades nine through twelve. Eighty-five percent of the schools had one marching band. One school had an unusual number of three marching bands with the eighth and ninth grades each forming separate groups. The number of weeks constituting the length of the marching band season ranged from three to sixteen, with an average length of 9.59 weeks.

Eighteen (72%) of the Class 1A schools, twenty-three (96%) of the Class 2A schools and seven (70%) of the Class 4A schools reported marching band in the instrumental music program. All twenty-seven (100%) of the Class 3A schools included marching bands in the instrumental music program. The average number of weeks for marching band season in each school classification was as follows: Class 1A, 10.47; Class 2A, 9.04; Class 3A, 9.83; and, Class 4A, 11.28.

Only sixty-five percent of the respondents indicated whether other instrumental music groups were scheduled during marching band season. This was an insufficient percentage of responses to describe accurately this aspect of scheduling practices in Southeast Missouri schools. However, the affirmative responses of thirty-six (43%) indicated that at least in those schools the instrumental music teachers were engaged in comprehensive instrumental music programs during a time of the year when the energies of music faculty and students are severely drained for the benefit of the athletic program.

## Table 13

## Marching Band Grade Levels

| Number of Marching Bands in Total Program | Grades | N (76) | Percentage |
|---|---|---|---|
| 1 | 9-12 | 34 | 45 |
| 1 | 7-12 | 16 | 22 |
| 1 | 8-12 | 10 | 13 |
| 2 | 7-8, 9-12 | 7 | 9 |
| 1 | 10-12 | 3 | 4 |
| 2 | 8, 9-12 | 2 | 3 |
| 1 | 8-9 | 1 | 1 |
| 2 | 7-8, 10-12 | 1 | 1 |
| 1 | 9, 10-12 | 1 | 1 |
| 3 | 8, 9, 10-12 | 1 | 1 |

Table 14

Lengths of Marching Band Seasons

| Number of Weeks | N (76) | Percentage |
|---|---|---|
| 10 | 16 | 21 |
| 12 | 10 | 13 |
| 8 | 7 | 9 |
| 9 | 7 | 9 |
| 6 | 4 | 5 |
| 11 | 4 | 5 |
| 13 | 3 | 4 |
| 14 | 3 | 4 |
| 15 | 3 | 4 |
| 16 | 3 | 4 |
| 10-12 | 2 | 3 |
| 4 | 1 | 1 |
| 5 | 1 | 1 |
| 3-4 | 1 | 1 |
| 7-8 | 1 | 1 |
| 8-10 | 1 | 1 |
| 9-11 | 1 | 1 |
| 12-14 | 1 | 1 |
| 13-15 | 1 | 1 |

$\bar{X}$ = 10.28 weeks

Table 15

Grade Levels of Marching Bands According to

School Size Classification

| Grade Levels of Marching Bands | MSHSAA School Classification | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1A (25) | | 2A (24) | | 3A (27) | | 4A (10) | |
| | N | Percentage | N | Percentage | N | Percentage | N | Percentage |
| 7-12 | 10 | 40 | 5 | 21 | 1 | 4 | | |
| 9-12 | 5 | 20 | 10 | 42 | 15 | 55 | 5 | 50 |
| 8-12 | 3 | 12 | 6 | 25 | 1 | 4 | | |
| 10-12 | | | | | 2 | 7 | 1 | 10 |
| 8-9 | | | | | 1 | 4 | | |
| 7-8, 9-12 | | | 1 | 4 | 5 | 19 | 1 | 10 |
| 7-8, 10-12 | | | 1 | 4 | | | | |
| 9, 10-12 | | | | | 1 | 4 | | |
| 8, 9, 10-12 | | | | | 1 | 4 | | |

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Table 16

Lengths of Seasons of Marching Bands According to School Size Classification

| Lengths of Marching Band Seasons | MSHSAA School Classifications | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1A (25) | | 2A (24) | | 3A (27) | | 4A (10) | |
| | N | Percentage | N | Percentage | N | Percentage | N | Percentage |
| 10 | 3 | 12 | 3 | 13 | 8 | 30 | 2 | 20 |
| 12 | 2 | 8 | 3 | 13 | 5 | 19 | 1 | 10 |
| 8 | | | 5 | 21 | 1 | 4 | 1 | 10 |
| 9 | 2 | 8 | 2 | 8 | 3 | 11 | | |
| 6 | 1 | 4 | 2 | 8 | 1 | 4 | | |
| 11 | | | 1 | 4 | 2 | 7 | 1 | 10 |
| 13 | | | | | 2 | 7 | 1 | 10 |
| 14 | 1 | 4 | 1 | 4 | 1 | 4 | | |
| 15 | 2 | 8 | | | | | 1 | 10 |
| 16 | 3 | 12 | | | | | | |
| 10-12 | 1 | 4 | 1 | 4 | | | | |
| 4 | 1 | 4 | | | | | | |
| 5 | | | | | 1 | 4 | | |
| 3-4 | 1 | 4 | | | | | | |
| 7-8 | | | | | 1 | 4 | | |
| 8-10 | | | 1 | 4 | | | | |
| 9-11 | | | | | 3 | 4 | | |
| 12-14 | | | 1 | 4 | | | | |
| 13-15 | | | 1 | 4 | | | | |

## Conclusions

No attempt is made here to judge the quality of any instrumental music program in Southeast Missouri. The information gathered by this survey is insufficient to facilitate such an evaluation. However, according to the results of this survey, the typical public school instrumental music program in Southeast Missouri can be described as follows:

1. The school grade structure consists of an elementary school (grades one through five), a junior high school (grades six through eight), and a senior high school (grades nine through twelve).

2. One instrumental music teacher is employed to conduct the program in the entire school system. This teacher holds a bachelor's degree in music education and is certified in both vocal and instrumental music, grades kindergarten through twelve.

3. Facilities for the instruction of instrumental music at the elementary level are available, but they are shared with general music and vocal music classes. No facilities are provided for students to practice individually during the day.

4. Facilities for the instruction of instrumental music at the junior high level are available, but they are shared with vocal music classes. No facilities are provided for students to practice individually during the day.

5. Facilities solely for the instruction of instrumental music at the senior high level are available. Facilities are provided on a limited basis for students to practice individually during the day.

6. The instrumental music facilities are located on the same campus so that students do not have to walk or be transported by bus or by car.

7. Classes other than instrumental music are offered at the elementary, junior high and senior high levels. General music is offered to all students at the elementary level. Vocal music is offered to all students at the junior high level and is supplemented by a general music class. Vocal music is offered to all students at the senior high level and is supplemented at times by a music appreciation class.

8. Grade six constitutes the beginning band program for which instruction is provided through full band instruction, supplemented, when possible, by small heterogeneous classes.

9. Grades seven and eight constitute the intermediate band program for which instruction is provided solely through full band.

10. Grades nine through twelve constitute the advanced band program for which instruction is provided solely through full band.

11. The instrumental music instructor, who is usually consulted by the administration during the scheduling process, does not generally work closely with non-music faculty in this process.

12. The instrumental music instructor is available only during a small portion of the day for the instruction of instrumental music. Other times he or she is teaching vocal music or other music classes.

13. Bus transportation of students adversely affects the instrumental music program;

students who must ride the bus to and from school are unable to attend before- or after-school rehearsals.

14. Sports programs are the predominant extracurricular activities limiting the time for instrumental music instruction.

15. Students are faced with some conflicts between the instrumental music program and science, math, and stricter graduation requirements.

16. An average of 10.5 hours per week is spent by the instrumental music instructor for instrumental music instruction at all grade levels.

17. The school has a marching band program consisting of grades nine through twelve for a season whose average length is 10.28 weeks.

## Recommendations

I offer the following recommendations regarding future studies in this area:

1. A survey of this type should be administered periodically--perhaps every five to ten years--to keep the information updated.

2. A similar survey should be done with a random sampling of schools in other geographical areas in the State of Missouri. The results would be valuable in a comparison of instrumental music scheduling.

3. A similar random sampling of schools in other rural areas in the United States might be done to compare scheduling practices in Southeast Missouri.

4. A qualitative evaluation of the public school instrumental music programs in Southeast Missouri could be achieved by obtaining the results of the District Music Festival hosted annually by Southeast Missouri State University. Based upon a high school's band ratings, a correlation could then be sought between the quality of a program and its scheduling status as reported in this study.

## References

American School Band Directors Association. (1973). The ASBDA curriculum guide: a reference for school band directors. Pittsburgh, PA: Volkwein Brothers, Inc.

Bessom, M.E., Tatarunis, A.M., & Forcucci, S.L. (1974). Teaching music in today's secondary schools. New York: Holt Rinehart and Winston.

Best, J.V. (1959). Research in education. New Jersey: Prentice-Hall.

Bollinger, D.E. (1979). Band directors complete handbook. West Nyack, NY: Parker Publishing Co., Inc.

Colwell, R.J. (1969). The teaching of instrumental music. New York: Meredith Corporation.

Dykema, P.W. & Cundiff, H.M. (1955). School music handbook: a guide for music educators. Boston: C.C. Birchard and Co.

Glenn, N.E., McBride, W.B., & Wilson, G.H. (1970). Secondary school music philosophy, theory and practice. Englewood Cliffs, NJ: Prentice-Hall, Inc.

Hoffer, C.R. (1973). *Teaching music in the secondary school*, second edition. Belmont, CA: Wadsworth Publishing Co., Inc.

Leonhard, C. & House, R.W. (1972). *Foundations and principles of music education*. New York: McGraw-Hill Book Company.

Missouri State High School Activities Association (1984-1985). *Music manual*. Columbia, MO.

Music source book, edited by H. Nohenac Morgan, 4th printing. (1951). Chicago, IL: Music Educators National Conference.

Normann, T.F. (1941). *Instrumental music in the public schools*. Philadelphia: Oliver Ditson--Theodore Presser Co.

Smith, C.W. (1982). Rotation scheduling: an alternative. *Instrumentalist*, *36*, January, 13-14.

Suzuki, S. et al. (1973). *The Suzuki concept: an introduction to a successful method for early music education*. Berkley and San Francisco: Diablo Press, Inc.

Swanson, F.J. (1973). *Music teaching in the junior high and middle school*. New York: Meredith Corporation.

Ward, A.J. (1941). *Music education for high schools*. New York: American Book Company.

# HOW DID WE DO IN THE PAST?

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It is surprising, in this day of consumerism (represented in the schools by the "accountability" movement) to find that little notice is taken of the wishes of the school patrons in the matter of music education. Music education meetings are called, conferences of music educators are convened, and seminars are organized so that music educators may discuss the state of music education. Rarely does anyone survey the opinions of those who have been in the music classes of the past or consult our former students to see if they have cherished or regretted their music experiences in the common schools. What do you suppose they remember of what they learned in music class? What do they wish they had learned? It was these two questions that impelled the investigator to undertake the present study. "They" are subjects in a sample of lay people who attended school in the United States.

For several years the investigator had indulged in informal questioning of people met during travels around the United States and in Europe about their own music education. No special set of questions was used in those encounters but certain questions kept coming up time after time. Finally the decision was made to carry out a formal inquiry.

## The Investigation

The investigation took the form of an interview-questionnaire survey. A questionnaire had been prepared that presented the questions that had arisen most frequently in the informal interviews that had been conducted prior to the formal study. Using the instrument that had grown out of the informal interviewing two pilot studies were carried out previous to the study reported here to test the effectiveness of the instrument. After each investigation the questionnaire had been edited and questions that elicited information of little or no value discarded. A set of twenty questions emerged that seemed to provide insight into basic issues. To those twenty questions were added questions that were of more general interest. Their addition was expected to make the real interest of the study expressed in the two questions, "What do you remember?" and "What do you wish you had learned?" less obvious. The answers to the questions were expected to reflect both the actual musical experiences in schools and the relevance of those experiences in the lives of the responder in the ten or more years that had followed their common school experiences to the present.

The resulting instrument allowed the subject to respond somewhat freely and still generate data easier to interpret than what would be generated by a set of totally open-ended questions.

Data collectors gave the questionnaire to the subject being interviewed to look at while he or she answered the questions because it was believed that such a practice exhibited more personal and genuine interest in the musical adventures of the subject than merely asking him or her to fill in the answers himself while the interviewer stood silently by. The use of a questionnaire in an interview format forced the interviewer to pursue only the questions for which data were being sought. In this way the use of the questionnaire added structure to the data gathering process.

Responders were under no obligation to answer every item. As a matter of fact, most subjects avoided answering at least one item on each questionnaire. If no more than five items were unmarked the set was deemed "usable" and data that were available from that questionnaire were used. Advanced undergraduate and graduate music education students gathered the data reported here between August, 1985 and February, 1986. Usable data sets were obtained for 237 responders. After all questionnaires were returned, scores were tallied and descriptive statistics prepared. With the exception of those on five items, responses fell into the same pattern as those in the previous studies. The five items were those which were open-ended (3, 4, 5, 7). As expected with a larger sample, there was a wider range of responses for these items.

## Discussion

### Income

One topic of primary interest was the effect income level of the respondent would have on responses. It was assumed that those who are more affluent might be more concerned about arts in education than those in the lower income brackets might be. People, especially those who are young and earn healthy salaries are in a position to buy musical experience. They own sophisticated stereo equipment, recordings and tapes, can purchase instruments if they want and can afford tickets to the opera, concerts, and recitals. If they have had a satisfying and effective music education, they can participate to the fullest because they have both the means and the knowledge.

In this study 40 of the responders were students in teacher education classes and were placed in the lower income classification (under $20,000) although their education might make them more aware of the arts in the education of the individual. In addition to these students 72 other responders claimed membership in the low income bracket. Fifty-nine who were interviewed placed themselves in the medium income bracket ($20,000-40,000) and 44 claimed membership in the upper income bracket (above $40,000). Since equal numbers were interviewed in each category more of those people in the top two categories did not report their income status than those in the bottom category. There seems to be no reason to suspect that this fact would affect the data in some systematic way and the disparity was ignored. See Table 1.

Table 1

Demographic data

1. General population data gathered by Cons 385 students.

2. Data from Cons 285 classes. Gathered in class.

3. General population data gathered by Cons 430 students.

4. General population data gathered by Cons 285 students. (summer)

5. Data from summer Cons 285 class. Gathered in class.

Gender: M=64 F=72

Number in income categories: H=44 M=59 L=72
Number in age group categories:

19-29-68
30-39=59
40-49=34
50-59=15
59-69= 3

## Age of Responders

Because income level was considered first and age second the cell numbers varied more for the age categories. One hundred and thirty-four responders were reported in the "young" (below 35 years of age) category. There were 69 subjects reported in the middle category (36-50 years of age) and 22 in the older category (above 50 years of age) (Table 1).

Due to this representation of younger persons the responses become particularly note-worthy in that they reflect with more compelling force the degree of satisfaction former students have with what has been going on in compulsory music classes in the past two decades. The youngest members of the older categories, the 35 years olds, were in compulsory music classes in the "50s". In this sample responders generally "liked music class" (63%). However, one hundred and thirty-eight were not "disappointed if they missed music class" (73%). In other words, although they liked music class if they went, they did not miss it if something else intervened.

What did the responders remember doing in music classes? Singing was the activity remembered most often (194 or 82%). Listening was reported by 114 responders (48%). One hundred and twelve reported "playing instrument" (rhythm band, autoharp, recorder, etc.) and 105 reported they remembered doing "note reading." After these four activities, number of responses for any particular activity fell off rapidly. Thirty-two percent (N=77) reported that they remembered "talking about music" and 54 (23%) remembered "doing dance or movement." Only one person could not remember doing anything in music class!

What do they remember that they liked best? "Singing" was the activity mentioned most often but received far fewer approvals than was expected. One hundred and ninety-four remembered singing in music class but only 84 (43%) remembered "liking it best." Some of the responders at first reported that they really did not like any of the music class experiences very much but when urged to cite the best of the lot they said "singing." On the other hand, twenty (11%) cited "singing" as the part of music class that they liked least and 17 (10%)

cited "singing alone" as the thing they liked least (see Table 2).

Table 2

Summary of responses to items 1-7

Items:

1. No music class=35
   Liked music class=150
   Didn't like music =28
   Didn't care one way or another=24

2. Disappointed if missed music class:
   No answer=5     Yes=47     No=138

3. What do you remember doing in music classes?
   1. Singing=194
   2. Listening (recordings)=114
   3. Played instruments (rhythm band, auto harp, recorder, etc.)=112
   4. Note reading=105
   5. Talked about music=77
   6. Dance, movements=54
   7. Wrote songs=11
   8. Rehearsed for programs=8
   9. Heard about composers=5
   10. Games=3
   11. Theory=2
   12. Learned syncopation=2
   13. Directed=2
   14. Don't remember anything=1

Table 2 (continued)

4. What do you remember liking best?
   1. Singing=84
   2. Listening=29
   3. Playing instruments=29
   4. Dance=10
   5. Some of the songs we sang=10
   6. Doing programs=5
   7. The girls=4
   8. Teacher=4
   9. Talking about music=4
   10. No homework and no study=3
   11. Christmas songs=3
   12. Learning about composer=3
   13. Doing things in a group=3
   14. No answer=3
   15. Nothing special=3
   16. Can't remember anything=2
   26. Harmony (harmonizing?)=2

Mentioned once:
Learning sharps & flats.
Got out of regular class.
Break from studying.
Music that had meaning for us at that age.
Listening to others.
Foreign language songs.
One particular song.
Rhythm work.
Singing parts.
Everything.
History of music.
Musical "baseball."
Learning pop songs.

5. What do you remember that you liked least?

   1. Note reading=26
   2. Singing=20
   3. Singing alone=17
   4. No answer=16
   5. No one thing=15
   6. The teacher=14
   7. Dancing=11
   8. Listening to records=8
   9. Some of the songs=8
   10. Endless rehearsing=7
   11. Talking about music=6
   12. Class structure=5
   13. Leaving=4
   14. Listening to teacher talk/play=3
   15. Discipline in class=2
   16. Not being able to talk=2

Mentioned once:
Not getting to play an instrument.
Not getting to play instruments.
Didn't like anything about it.
Listening to instruments.
Reading "ti-ti's".
Listening to the other kids.
Workbooks
Practicing for programs.
Same old songs.
Liked most everything.
Taking notes.
Only met once a week.
Names of the lines and spaces.
Music history.
The music.
Birthday ritual.
Listening to an opera.
Singing in unison.
Drawing notes.
Sewing a bag for a flut-o-phone.
Drawing notes.
"Do-re-mi's and ti-ti's.

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Table 2 (continued)

6. Things you learned in music class that you remember:
    1. Songs=37
    2. Nothing=35
    3. No answer=14
    4. How to play a specific classroom instrument=10
    5. How to read notes=9
    6. Scales=9
    7. Instruments of the orchestra=9
    8. Nothing in particular=6
    9. One particular song=6
    10. Rhythm or tonal syllables=5
    11. Patriotic songs=3
    12. Dance=2
    13. How to find part in score=2
    14. How to "direct"=2
    15. How to sing=2
    16. To appreciate music=2

Mentioned by one person each:
Virginia Reel.
How to sing a round.
Composers.
How to behave in a large group.
Note values.
Key signatures.
Middle "C".
To appreciate Classical music.
That I loved piano.
How to count correctly.
How to draw notes.
Gregorian chant.
Negro national anthem.
That I have good pitch.
Rhythm.
What a quarter note is.
Clap rhythm.
Who wrote the national anthem.
About a composer.
Operas.
A dance.
Theory.
Syncopation.
Singing intervals.
Music history.
That I liked contemporary music.
Tolerance.
Music and singing is fun.
Music can tell a story.

7. What do you wish you had learned in elementary music class?
    1. To play a real instrument=33
    2. No answer=32 (Comment: "I don't know what it is I want")
    3. How to read a score=32
    4. Nothing=19
    5. Singing fundamentals, or How to sing=16
    6. About the music itself=14
    7. Appreciation of Classical music=10
    8. About the instruments=10
    9. How to hear music=8
    10. More theory=8
    11. More songs=6
    12. Lots=5
    13. More about famous composers=5
    14. Not sure=4
    15. About symphonies=2
    16. About operas=2
    17. Music terminology=2
    18. How to understand music=1

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"Listening" and "playing instruments" were reported as best-liked by 29 persons (15%) in each case. No one reported disliking either activity although one person disliked "listening to an opera" and three disliked listening to the teacher talk or play.

"What were the things that you learned in music class that you remember?" This question produced some surprising answers. Single items such as "Middle 'C,'" "What a quarter note is," and "One particular song" (reported by six people) cause the reader to wonder if seven years of required music classes should not have produced more learning. Even more distressing are the cases in which individuals thought they had learned "Nothing" or "Nothing in particular." The teachers who ponder the hidden curriculum in music class will be glad to learn that one person learned "Tolerance," one learned "How to behave in a large group," and one learned "How to draw notes" (see Table 2).

Of critical importance to the music education profession is the question, "What do you wish you had learned in elementary music class?" "To play a real instrument" was the answer most given with 33 (16%) expressing this wish. A total of 99 answers were given to questions dealing with learning musical information (47%). Some declared they wish they had learned to "read the music." One subject clarified this wish when he told the interviewer, "I'd like to be able to read the notes, then I'd understand the music." If they could just decode the symbols on the staff they could magically "understand" the music--much as in reading literary materials one can often understand the message if one can just decode the words. This does not work in a foreign language and the responders were quite unaware that being able to decode notation would not assure that they would be able to understand the musical ideas expressed therein.

Thirty-two gave no answer and several of them qualified their answer with "I don't know what it is I want" (see Table 2). They were not satisfied and recognized a desire for something but could not put it in words. Apparently they have not only not learned musical knowledge that they think is important but they have not learned to articulate their concerns about the things they wish they had learned. "Learning to sing," or "singing fundamentals," and "more songs" were responses of 22 persons (11%). These responses were given in spite of the fact that singing was reported as the most prevalent activity in the music classrooms they attended. It may mean that as children they were asked to sing songs but never taught how to sing. Other data that may be of interest to the reader are found in Table 3.

Table 3

Summary of responses to items 8-34

8. What is a fugue? Knew=3 Didn't know=191 Hazy idea=20

9. About opera:
Have gone to an opera=97
Have not gone to an opera=114
Gave no answer=1

Did you understand it? yes=67 no=30

Would you go again? yes=73 no=13 maybe=2 no answer=2

10. Did you ever listen to an opera in music class?
yes=43
no=152
Don't remember=10

11. Have you ever taken piano lessons? Yes=116 No=95

How long did you study?
0-12 months = 38
13-24 months = 25
25-36 months = 18
37-48 months = 7
More than 48 months = 25

12. Have you studies any instrument (other than piano)? Yes=99 No=96

How long did you study?
0-12 months =25
13-24 months =14
25-36 months =16
37-48 months = 9
More than 48 months = 26

13. Have you had voice lessons? Yes=30 No=179

How long did you take lessons?
0-12 months = 12
13-24 months = 9
25-36 months = 4
37-48 months = 4
More than 48 months = 8

14. Have you ever played in a band? Yes =70 No= 139

How long did you play?
0-12 months = 9
13-24 months = 8
25-36 months =12
37-48 months = 9
More than 48 months = 26

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Table 3 (continued)

15. Have you played in an orchestra? Yes=27 No=188

How long did you play in an orchestra?
0-12 months = 8
13-24 months = 7
25-36 months = 3
37-48 months = 0
More than 48 months = 8

16. Have you sung in a choir? Yes=155 No=79

How long did you sing in the choir?
0-12 months = 19
13-24 months = 25
25-36 months = 20
37-48 months = 18
More than 48 months = 35

17. Do you listen to music on the radio? Yes=198 No=8 Some=8

18. What station do you listen to most:

KUDL (98) Adult/contemporary/Rock = 25
KBEQ (104) Rock =25
KMBR (100) Easy = 20
KLSI (93) Contemporary = 16
KCUR (89) Public/classic/jazz = 15
KYYS (102) Album/Rock = 13
No special station = 10
KCFX (101) Classic Album Rock = 10
KBKC (94.1) Contemporary hits = 8
WDAF (610) Country = 7
KJLA (1190) Music of the 40's and 50's = 5
KANU (5)
KCMO (810) News and talk = 5
KCMBZ (980) Information = 4
Respondents who watched one or another of the inspiration stations=5
Respondents who watched "Soul and Rock" but did not specify a station=2

19. Do you have stereo equipment in your home? Yes = 183 No= 33

20. How many tapes or recordings do you buy in an average year?
0 = 35
1-5 =91
6-10=27
11-15=22
16-20= 6
21-25=10
More than 25=12

21. Do you belong to a record club? Yes= 17 No=195

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Table 3 (continued)

22. How do you decide what recording you will buy?
    1. Heard it on the radio = 158
    2. A friend recommended it = 60
    3. Heard it on TV = 40
    4. Heard it at a friend's house = 39
    5. Recommended by one of my family = 36
    6. Read a review in the paper = 19
    7. I like the performing artist = 8
    8. I like the composer = 2
    9. I heard it at a concert = 2

    Each of the following were mentioned once:
    Movie sound track
    From a Broadway musical
    Heard it at church
    By type of music
    No answer
    Needed it for work (preschool)

23. What kind of music are you most likely to buy?
    1. "Easy" listening = 79
    2. Rock = 79
    3. "Pop" = 69
    4. Symphonic = 60
    5. Church = 42
    6. Country = 30
    7. Chamber = 22
    8. Jazz = 14
    9. Movie soundtrack = 13
    10. Opera = 7
    11. Sousa = 4
    12. Broadway musical = 4
    13. Any = 2
    14. Big band = 2
    15. Classical = 2
    16. "Contemporary" pop = 2

    Mentioned once each:
    Rhythm and Blues
    Dance
    Oldies but goodies
    Sports memorbilia
    Blue grass
    Folk
    Funk
    Special instrument
    Blues

24. Do you like "sing-along's"? Yes=126 No=66 Occasionally=21

25. Do you sing while driving your car? Yes=137 No=46 Occasionally=29

26. Do you sing in the shower? Yes=73 No=122 Occasionally=15

27. Do you sing with your children?
    Yes=93
    No =57
    No children = 53
    When they were smaller = 4
    Sometimes = 3

28. Do you sing at church (not in choir)?
    Yes = 169
    No = 40
    No church = 12
    Occasionally = 3

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Table 3 (continued)

29. Do you sing while dancing? Yes=82 No=97 Sometimes=26

30. Do you sing with the radio while you are driving?
Yes = 155 No =33 Occasionally =26

31. Where did you learn the songs you sing?
In school = 7
Out of school = 145
Both in and out of school = 25

32. Most of the time would you listen to a sports program or to a music program while you drive the car?

Sports program = 28
Music program = 173
Depends = 5
Neither = 1

33. If your own child attended a European School would he or she be likely to learn more about music, less about music, or about the same about music as if he or she attended an American School?

More = 120
Less = 24
About the same = 33
No opinion = 11

34. What is interesting about the third and fourth movements of the Beethoven Symphony No. 5?

1. Goes right into the 4th movement without stopping at the end of the third movement = 0

2. Didn't know = 207

The results of the survey reminded me of the statement of an innkeeper with whom I chatted one Sunday morning in Norway. She told me that she and her friends "liked music class." However, they "didn't regret it when they missed school on music class day," "because we knew that what we did in music class wasn't really important." She said they "sang a lot," "the teacher brought in some instruments once in a while, guitar, recorder, and autocharp," and sometimes they "listened to records." When I asked her what they wished they had learned in music class, she said, "We know about our music--popular music . . . You know, Bach and those people." After a bit she continued, "If we couldn't have that, we would have liked to have learned to play one instrument well enough to play it."

## Conclusions

Many music teachers do not like to teach students to play the "common" instruments or do not like students who do not aspire to be virtuosi performers. Other teachers are most interested in singing activities and are reluctant to teach listening skills. Yet these may be the primary interests of our students. The general public is seldom consulted in the planning of music curriculum. As music educators we have prescribed what the children should learn in music class or what we wish to teach. Rimer (1982) forces us to consider whether our preoccupation with "music on our terms" may have been "a bit unreasonable and a little too ambitious and a trifle presumptuous." Can we, as music educators, even entertain the possibility that the public we want to serve may want our talents and skills to serve them a different way?

The data in this study suggest that we should stop and consider how well our music curricula meet the needs of the public. If we consider how the public can use what we teach, we may be able to suggest other things that they might not know about that would help them to still greater understanding of music--perhaps things we are more eager to teach.

## References

Jetter, J.T. (1986). What did we learn from the first chance? Paper presented at the meeting of the International Society for Music Education, Innsbruch, Austria, July 10, 1986.

Reimer, B. (1982). A radical view of the present and future of music education. In Richard Colwell (Ed.), Symposium in Music Education: A Festschrift for Charles Leonard (pp. 3-22). Urbana, IL: University of Illinois.

# A GENERAL HISTORY OF THE COMPETITION-FESTIVAL TO 1960

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> Shortly after the Armistice of 1918 which ended the First World War, the public, private, and parochial schools and colleges of America were beginning to show an avid interest in a comparatively new game called football, which together with the equally competitive high school band contest, was to become to the educational band movement what the gradually disappearing amusement park had been to the professional concert band. (Fennel, p. 40)

The discharge of army trained musicians and conductors at the end of the First World War left a large supply of musical people seeking employment. From these ranks came a wholesale influx of musicians into the public school systems who were to direct, for the first time on a wide scale, our school bands (Fennell, p. 46). The first mention of a school band, however, dates back to 1857 when a school band was organized by John Ripley Morse at the Boston Farm and Trades School. Several boys from this band went to the Union Army as musicians, and the band played for the great Peace Jubilee under guest director Patrick S. Gilmore. Morse was director for nearly fifty years; the band later entered the first New England Band Festival in 1926, but by that time the school had been renamed to Thompson Academy (Albee, p. 96).

The school band movement following the First World War was coincidental with an educational movement wherein "experience" subjects were for the first time being considered with importance long reserved for the "subject" curricula. Bands began to flourish in the schools at a much faster pace than was experienced some years earlier with orchestras (Fennell, p. 46). (In 1907 a band was organized at Connersville, Indiana, and a year later Will Earhart reported that he had organized a school orchestrated at Richmond, Indiana. Later, this group earned high recognition under the direction of Joseph E. Maddy. By 1915 a sample survey of sixty-eight major school systems revealed that fifty-eight had an orchestra with an average membership of seven, and twenty-three of the school systems were giving school credit for this work. However, only one such group rehearsed during school hours. By 1919 a survey by Edward B. Birge to twenty-six states provided three hundred fifty-two replies showing two hundred seventy orchestras with one hundred fifty-six for credit. This same survey revealed only eighty-six bands, of which forty-three were for credit. Soon, however, the glamour of band and its usefulness to public events and athletics overshadowed orchestras) (Gordan, pp. 34-35).

Here was an opportunity for free instrumental music lessons during school hours. The musical instrument industry had expanded during the First World War, and grasping this opportunity began to push high school bands as a business venture (Fennell, p. 46). These manufacturers offered long-term assistance to any school wishing to build a band. The publishers jumped on the literal band wagon and began to put no little emphasis on publications to be played by the school band. Beginning in 1923, the instrument industry sponsored the first of many contests for band, this time in Chicago.

The educators began to complain of the commercial aspects, and the industry invited the teachers to run the contests with industry footing the bill. To this idea two organizations came forward, the Music Supervisors National Conference and the National Bureau for Advancement of Music. Both are important in establishing the band contest movement. The National Bureau of Advancement of Music handled the administrative problems of early contests while the Music Supervisors National Conference fostered the Committee on Instrumental Affairs. This committee pushed the value-of-competition idea back to the schools and established contest literature, prizes, and rules for the contest years 1924 to 1926. Based on these developments, the first truly national school band contest was held in Fostoria, Ohio, in 1926. At this time the National School Band Assocation came into effect. At the national contest at Joliet, Illinois, in 1928, this new group was given control over solo and ensemble contests (Fennell, p. 46). By 1932 the number of bands competing in state contests, which were in fact elimination bouts, had reached one thousand and fifty with all but four states represented (Fennell, p. 46).

About this time the talking pictures forced even more musicians out of business. Many went on to college studies to become the second wave of college and public school band directors (Fennell, p. 47).

At the fourth biennial meeting of the Music Educators National Conference (formerly the Music Supervisors National Conference) in Chicago, April 8-13, 1934, demonstrations of small instrumental ensembles were given importance (Birge, p. 274) and the program of the high school band began to expand even more. This began to broaden the aspects of the contest. The contests expanded, but grew into carnivals in which musical considerations played a poor second to the problems of transportation, housing, and feeding. In later years, fine bands played to almost no contest audiences, save a few parents of the performing band (Righter, p. 63). About all that was left to play for were material or money prizes (Dykema, p. 309). Long hours were spent on the same numbers for the contest. The bands were judged in 1, 2, 3 (sequentially ranked) basis and even the best of bands had but a slim chance when it came to a final rating. No comments were given by the judges. Sometimes the director lost his job because of a low rating or lack of rating. Music value was lacking (Wilson, p. 116).

The school band contest was, on the other hand, vital to the growth of school instrument music and to the instrument industry, in both instances far beyond earlier dreams. Contests did much to standardize instrumentation, promote worthwhile band publications, raise the quality of instrument manufacture, and aid in raising the directors' salaries (Fennell, p. 47).

The contests were not all virtue, and the spirit of competition outdid the spirit of music making. Many bands met disappointment time and time again, and the contest began to snuff its own life out (Fennell, p. 43).

Something had to give. In 1936, a relegating of the problem from all aspects produced a resolution from the Music Educators National Conference to eliminate word "contest." This was done, and in its place appeared "competition-festival" (Wilson, p. 117). It had become evident that the contest winners were no more interested in music and the losers often less interested (Wilson, p. 119). Thus the new concept in the form of the competition-festival took this general shape. Music to be played would be selected by an expert committee. Clinics would be held with emphasis on the music. A new system of ratings would be used with the following terms: Highly Superior, Superior, Excellent, Good, Average, and Below Average. This sytem, the brainchild of Frank A. Beach, would test the band against a standard of excellence and not against any other group. Thus a band could evaluate itself in terms of artistic standards rather than in terms of comparative standards. Three judges were used, and their written comments went to the director. A part of the competition-festival was combined groups to perform works of a very high caliber. New friends were to be made. The emphasis would be placed upon the making and listening of music together (Wilson, pp. 118-119). Thus a new pattern was formed.

Confusion still reigned, for in 1936 there remained but one national event. By 1938, the new competition-festivals were held regionally in ten parts of the nation. This cut the travel problem and allowed more bands to participate, but in each of the regions the congestion problem and its effects was still the same. Fortunately perhaps, World War II brought national-regional competition-festivals to a close (Righter, p. 64).

In some areas festivals are still held which cover more than one state, but these are individually operated with no connection to the national organizations and generally lean to marching.

The National School Band Association joined with similar choral and orchestral groups within the Music Educators National Conference to form the National School Band, Orchestra and Vocal Association, an official annex, which stood only as a service organization with state or other echelon competition-festival groups free to govern themselves. This group later became known as the National Interscholastic Music Activities Commission (MENC, p. 40).

## Administration of the Competition-Festival

It was the policy of the National School Band Association, the National School Orchestra Association, and the National School Vocal Association to publish yearly a manual containing the rules, procedures, and listings of music for the national contests which subsequently became the national competition-festival and still later the national-regional competition-festivals. The last year of the national-regional competition-festival was 1943, and the following description of rules is taken from that year's manual. This is of importance, since this is the general groundwork for conduct of today's events with local variation.

For purposes of this article, explanation of these rules is listed for the band field only, but similar applications were extended in the manual to orchestra and vocal groups.

1. The recognized national-regional events were as follows:

Class A Bands--Concert--Sight Reading--Marching
Class B Bands--Concert--Sight Reading--Marching
Class C Bands--Concert--Sight Reading--Marching

2. The determination of classes was based on the school enrollment of the upper four grades total for the school from which the band represented plus any regular members of the band in the lower grades included in the enrollment total. Classes were divided as follows:

Class A Bands--Bands from schools of enrollments of 751 or more.

Class B Bands--Bands from schools of enrollments of 250 to 750.

Class C Bands--Bands from schools of enrollments of less than 250.

This system was suggested for state level competition-festivals with the option of taking enrollment totals from the upper three grades rather than the upper four. This would allow some bands to enter a lower classification, but any band entering a national-regional event was bound to adhere to the upper four grade classification system. Another optional classification system outlined in the manual called for a more elaborate division of classes, assuming that on the state level the number of bands would be such as to require more classes. In this instance, enrollment could be determined at state option from either upper three or upper four grades. Again, any member not in the upper grades must be included in the enrollment total. This system was:

Class AA Bands--Bands from schools with enrollments of 1,501 or more.

Class A Bands--Bands from schools with enrollments of 751 to 1,500.

Class BB Bands--Bands from schools with enrollments of 401 to 750.

Class B Bands--Bands from schools with enrollments of 251 to 400.

Class CC Bands--Bands from schools with enrollments of 101 to 250.

Class C Bands--Bands from schools with enrollments of 100 or less.

A band was allowed to enter a higher classification than enrollment dictated, but in no case a lower classification. No provisions were made for junior high, elementary, junior college groups, this being in the hands of the local sponsors. Each band participating in local, state, or national-regional revents was required to be a member of the National School Band Association.

In defining the eligibility of a band to participate in the national-regional competition-festival, these specific rules applied. A band must earn a Division I (Superior) rating in a state level competition-festival, or in some cases a Division II (Excellent) rating, this latter instance dependent on recommendations by the state organizations. A band receiving a Division I rating at a national-regional competition-festival was automatically allowed to re-enter the national-regional the following year and each year thereafter until its rating was changed by playing. So long as a band maintained Division I ratings at the national-regional, it could not enter a state or lesser event, but could appear as a guest band after other groups had finished playing. A Division I band could, however, forfeit its right to return and again enter local or state events at any time.

The time limit imposed on each band was thirty minutes followed by a sight reading audition. During the thirty-minute concert audition, the bands were required to perform a march or quickstep followed by two concert selections, the first being a required number and played by all bands of the same class, and the second a selection of the director's choice from a special acceptable list of music graded according to classification of the band by enrollment. This list appeared in the manual each year. Of these three selections, none could be a number performed by the particular band in a state or national-regional competition-festival within the period of three prior years of competition. A full score for each number played was supplied each judge.

The judging, which follows in detail later in this article, was based generally on interpretation, tone, intonation, general effect and sight reading. Ratings were given on five levels: Division I (Superior), Division II (Excellent), Division III (Good), Division IV (Average), and Division V (Below Average). Each band was allowed thirty minutes to warm up before audition and the amount of time necessary for sight reading which followed the concert audition. Awards in the form of bronze plaques on polished wood were authorized for bands receiving the top three divisions of ratings.

## Administrative Changes to Meet Local Needs

This manual, the last in its purpose as a national-regional competition-festival guide, has been supplanted by state and local organizations who have published their own manuals and established their own rules. In its waning days, the national-regional administrators began to give state groups more of a free hand, allowing them to schedule only the type and number of events necessary to the location, to determine eligibility and enrollment ratios for the classes, to add classes, to set up music lists, or in short, to govern all matters locally. The only real requirements placed on the states by 1943 were that the standards of adjudication be maintained on the same high level as the national-regional event and that a state require a band to receive ratings which would determine its entry into the national-regional from its home state only. This would deter a band from entering a state competition-festival in another state where its chances might be better.

The death of the national-regional event as a result of the Second World War left the state and in some instances district competition-festivals as the terminal events. With no parent organization to keep pace with, the various areas soon began to make changes which would be more suitable for the locality.

Two of these changes were reported in a committee report which appeared in the Music Education Journal, May-June 1945, under the title "Competitions and Festivals."

The first major deviation discussed in this article took place in Florida under the auspices of the Florida Bandmaster's Association. This plan was used during the second and third years of the Second World War and was continued for a time after the war. Called the "Band Inspection Plan," a duly elected judge would travel from school system to school system and audition the bands, either in local concert or in the rehearsal room. Music was played from a graded list prepared by the Florida Association. The judge would remain long enough to present comments to the director concerned and answer any questions.

Standards were kept on the level of the national-regional events. After the war and its effects had passed and the transportation of bands was again feasible, Florida adopted its present system of six district competition-festivals of one day each in six areas of the state with bands rated Superior going on to play in one of two regional competition-festivals. These are the terminal events, and a recent survey of principals, directors, and parents shows satisfaction in this means of operation (Bachman, p. 18). The smoother the festival is operated, the more value to all concerned (Bayless, p. 30).

The second plan discussed in the article is one developed by the New York State School Music Association. In this instance, a director must choose six selections from a list of graded music, and he will enter in a grade of music according to the ability of his band. Thus, a director might choose to enter his band in Grade III music if he feels that grade of music is the best that his band can master. At the concert audition, he will play one number from the prepared six at the judges choosing and one of his own choosing from the remaining five selections.

This New York plan has received considerable attention from other areas and it is being copied in part in many areas of the nation, especially Virginia and Wisconsin.

Under this plan, the directors whose bands receive a Division I rating are encouraged to enter a higher grade of music the next year. If a II and III is received, the band should in all probability remain in the same grade of music; and if a IV or V is received, a lower class should be entered the following year (Wilson, p. 120).

A new concert festival concept was used in 1946 in Portland, Oregon, when ten groups performed in concert both as a combined group and individually playing music planned in advance to a general theme (Ernst, p. 26). Present were qualified adjudicators who, in the days after the festival, visited each of the participants and in conclusion held a joint clinic with all directors. The students in this case were more excited in performing before and with other groups and in front of a large audience. The audience was pleased, and the stock of the local music program boomed. Since no group performed the same selection, the entire presence heard a unified variety. Each school was able to choose music within its ability and extra rehearsal time was not essential. The ratings and comments by the judges were helpful but still unofficial. To end it all, the administrators were pleased.

## A COMMENTARY

# TEACHING LISTENING, BREATH SUPPORT AND SENSITIVITY THROUGH THE A CAPPELLA ART

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As choral rehearsals begin each year, it is exciting to hear the first sounds the choir makes with its new and returning personnel gathering for the first time. Even more exciting is the notable improvement which occurs as notes become more secure and we begin to comprehend the real potential of our ensembles.

However, the day may arrive when we test the choir on a piece of music without the security of instrumental accompaniment. What happens to the sound of the choir when it can depend only on its own musicianship and vocal technique rather than on the steady support of the piano or instruments?

Many of us hear sounds that we do not like, such as poor intonation, lack of blend and balance, inconsistent vowels and lack of sustained breath support which will often result in either a tight, strained tone or a flat, breathy sound. The fact is, the accompaniment to which our choirs often desperately cling allows us to hide many of our choral deficiencies. Our job as music educators is first to identify these weaknesses and then work to strengthen and correct them rather than to cover and perpetuate them.

A cappella singing makes both teachers and students come to grips with vocal technique, ear training and musicianship.

Where do we begin to teach these skills? First of all through our choice of music: Are we selecting a program that is entirely accompanied?

In recent years many publishing houses have not been very helpful in promoting a cappella singing. However, publishers print what conductors purchase. Today, the majority of new music being published is accompanied and simplified, designed for quick learning. This type of literature certainly has a place in many choral programs and often does a service in representing teaching material that is accessible for our amateur singers. Where would the average church choir be without it as they perform their numerous anthems each year?

Let's be honest though, and ask ourselves: Are we guilty of taking the quick road to an adequate performance rather than really teaching our students the basic techniques of good singing? This "quick learning" music needs to be balanced with a variety of literature representing many historical periods, styles, and colors--including a cappella music as well as instrumentally accompanied pieces.

A choir that is just learning to sing a cappella needs to begin with less difficult literature. That choir also needs a patient and persistent director. The director must train the singers to listen and to support the tone, not relying on instruments to prop up sagging pitch, reinforce insecure notes or hide ragged entrances and cut-offs.

The singers must learn to listen to each other and to the bass section in particular as the foundation of the harmony. This presents greater problems for the choir that is over balanced with treble voices. The treble voices must learn to listen to the bass or they will most likely have intonation problems.

If the bass is the foundation of the choir, then it MUST be clean and accurate. Intonation improves when the upper voices can hear a solid bass line to which they can relate their part in the harmonic structure. As an added result, when the upper voices listen for the bass, the balance improves. This then, is an encouragement to the men of the choir because they do not feel overshadowed by the treble voices.

Even when the numbers of singers are balanced, the physics of sound dictate the way we must treat each of the sections. The higher frequencies (soprano in the women's choir and tenor in the men's choir) will naturally overshadow the lower frequencies (alto and bass respectively). The conductor must be able to counteract this phenomenon by means of the conducting language. Usually this means enhancing or bringing out the lower frequencies and toning down the higher frequencies as needed.

In conjunction with listening, we are able to teach healthy vocal technique through a cappella singing. Vitality of tone is directly related to good posture, correct breathing and relaxed jaw, tongue, and throat muscles. Singing a cappella enables us to hear the unpleasant sounds that result from poor vocal technique and to identify their source, i.e., the tenor who is singing flat as he strains for the high notes; the unsupported, breathy alto sound; the fuzzy, swallowed bass sound; the shrill and perhaps sharping soprano.

Where do we begin to fix all of these many vocal problems?

1. Take the time to establish and insist on good posture, whether the choir is standing or sitting. Physical stimulation such as running in place, stretching and massaging shoulder muscles can help.

2. Take a few minutes to remind the singers of correct breathing technique. While they are standing, encourage them to take a low breath, keeping chest high, shoulders down and relaxed, and to exhale with a steady stream of intense air. In the way that a brass player needs steady breath pressure to buzz his lips, a singer needs that same kind of steady breath pressure to create a supported singing tone.

During the rehearsal:

1. Teach the choir to make clean, quick moves, not sliding to pitches.

2. Teach accurate and consistent vowel sounds, i.e., are the singers singing an O or is it a conglomeration of AW, UH, O, etc.

3. Teach even vowel resonance. Shape the mouth for AH and sing all the vowels with that space and amount of resonance.

4. Teach accurate singing of intervals--pointing out and correcting troublesome intervals such as descending minor 3rds and minor 2nds, the seventh of a major scale and the third

of a major chord. All of these pitches will tend to be low.

5. Teach the choir to sing through the vowel and through the phrase working toward steady support behind each vowel and not allowing the support to wane at the end of each note. Relate this to the breathing exercises that were done at the beginning of the rehearsal.

6. Begin to teach musical phrasing as soon as the piece is introduced. This will heighten interest in the piece as well as assist in teaching support. The energy and drive of the phrase encourages the singer to sing through the line. In teaching the musical phrase, we cannot be limited to verbal description. The phrase comes alive through vocal demonstration and the intensity and relaxation shown within the conducting pattern.

When singing a cappella, the singers cannot rely on the musicianship of the accompanying instruments, but must themselves create the life of the musical phrase. As the conductor mimes his concept of the phrase, it draws the student into a more involved musical experience. The degree to which the singers and conductor learn the music will have a great bearing on their musical involvement. Memorization by both the choir and conductor creates the ultimate involvement and thereby enhances the performance.

It is easy for the singers (to say nothing of the director) to become discouraged when working on a cappella music. In some respects, that is the first step toward improvement. They have come to realize that they are not singing as well as they thought they were. This is when the director has to be strong--encouraging the students and resisting the temptation to fall back on accompaniment.

Since every sound of the a cappella choir is clearly exposed, the singers must learn to be more technically careful, more sensitive to each other and to the subtleties of the musical line. As a result, our students become more independent singers with more finely tuned ears and a greater sensitivity to the music. A cappella singing requires a high level of concentration and self-discipline. Artistic expression is based on these two skills and we are often guilty of not demanding enough from today's students.

Certainly, the same care and attention should be taken in preparing choral pieces with instrumental accompaniment and will result in a higher level of performance in any case. However, the real test of a fine choral ensemble is its ability to sing a cappella music well.

# A COMPARISON OF TWO PROCEDURES FOR TEACHING A ROTE SONG: PARROT AND REVERSE CHAINING

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Problem: Is the achievement in learning a rote song different when the song is taught by reverse chaining than when the song is taught by a parrot technique?

Hypotheses: 1. There will be no significant difference (.05 level) in the achievement scores of fourth grade children in elementary music classes in schools of similar socio-economic levels when a rote song is taught by reverse chaining and when it is taught by a parrot technique. 2. There will be no significant correlation (.05 level) between the reading score and the difference of achievement with the two methods of teaching a rote song. 3. There will be no significant correlation between the students' scores on the Music Aptitude Profile and achievement scores in learning a rote song (.05 level) related to one method or the other. 4. There will be no significant difference (.05 level) in music achievement scores due to the gender of the students.

Subjects: One hundred-forty-six fourth grade students enrolled in selected schools in a relatively rural midwestern region were used for this study.

Data Source: Pitch and word scores from both the parrot technique and the reverse chaining technique were entered as primary data. Reading scores from the Iowa Basic Skills Test, Music Aptitude Profile scores, and gender were entered as secondary data.

Treatment of the Data: The analysis of the data was made by tests of correlations and *t* tests.

Conclusions: The mean scores were higher for the parrot technique and were significant at the .05 level. Correlations with reading scores were shown; however, there was no correlation with either MAP scores or gender. Results of the study indicate a need for much further research before valid conclusions can be made.

## A COMPARATIVE SURVEY OF THE QUALIFICATIONS, TRAINING, AND FUNCTION OF SUPERVISORS OF STUDENT TEACHERS IN MUSIC AT SELECTED MIDWESTERN COLLEGES AND UNIVERSITIES

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The purpose of this inquiry was to investigate the qualifications, training, and function of the university supervisor of student teachers in music from teacher training institutions in seven midwestern states. A description of these persons was derived from their responses to a questionnaire. The description was afforded further depth through a supplementary statistical analysis.

Findings indicate that most supervisors of music student teachers are music specialists with doctoral degrees and some elementary and/or secondary teaching experience. Almost half have served as cooperating teachers and are actively involved in the current school music teaching situation. Contrary to past research, almost fifty-six percent of the supervisors have completed some type of formal training for the role. A list of functions required of these supervisors was derived. Results show a trend toward consistency in the qualifications, training, and function of the members of this diverse population.

## MEANTONE TEMPERAMENT AND THE MODERN ORCHESTRA: A PRELIMINARY EXAMINATION

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The purpose of this thesis is to examine current orchestral temperament, and the possible use of meantone temperament as the standard tuning (benefits and methodology). This examination is accomplished through a survey of available literature, mathematical theoretical speculation, and acoustical experimentation and analysis.

The first part, "Understanding Contemporary Orchestral Temperament," gives mathematical models for the Pythagorean, equal, and just tuning systems, and relates them to existent data. The following was determined:

1. Ensemble string playing is characteristically Pythagorean

2. Ensemble wind playing is characteristically equal-tempered (a modified form of Pythagorean tuning)

3. Just intervals/chords are the basis of perfect intonation, and are possible on all instruments. However, just intonation is impossible to execute, and thus its use is limited to cadences and some sustained chords.

The second part, "Meantone Temperament: A Potential Improvement," examines the benefits of meantone temperament, its feasibility, and methodology for its use. Meantone temperament was selected for examination because it is a modification of just intonation. The main points of this section are as follows:

1. Meantone temperament portrays the characteristics of tonal music better than Pythagorean/equal-temperament

2. An examination of the spectra produced by Pythagorean, just, and 1/4 comma meantone chords shows that the just form represents the acoustical ideal, with meantone being a close approximation of that ideal

3. A comparison of the characteristics of meantone temperament and those of orchestral instruments (established in Part One), demonstrates the meantone temperament is potentially feasible for use by the modern orchestra

4. An acoustical analysis of a passage played by string instruments tuned meantone shows that tuning the strings in meantone fifths results in meantone playing by the players

5. Many of the fingering charts, tuning procedures, warmups, etc., needed to facilitate the use of meantone temperament are developed using the mathematics of meantone temperament, and known instrumental acoustics.

Overall, this examination is preliminary, and thus a final determination regarding the feasibility of the use of meantone temperament is not made. Instead, it is hoped that this examination can serve as preliminary information for a more thorough study of meantone tuning in contemporary orchestral performance.

## SELECTED LATIN CATHOLIC CHURCH MUSIC OF ROBERT LUCAS PEARSALL: A STYLISTIC ANALYSIS

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Although Robert Lucas Pearsall (1795-1856) is primarily known for his madrigal and part-song composition, he also composed a number of works for the Catholic church. In spite of his popularity, no detailed analytical study exists of his Latin Catholic church music. This study analyzes and evaluates Pearsall's stylistic tendencies in the Latin Catholic church music, and attempts to clarify his historical perspective in terms of both the Romantic era and the German Catholic reform movement.

Sources consulted include Pearsall's manuscripts located in the British Museum and in the Stifts Musik-Bibliothek in Einsiedeln, Switzerland. Other sources included in this study are the numerous letters by Pearsall which were edited and published by William B. Squire in *Musical Quarterly* and *Musical Times*.

The study is organized into four chapters. The introductory chapter establishes the intent of the study, and includes biographical information, a survey of extant literature, and information regarding source materials consulted. The second chapter summarizes two major influences on Pearsall's Latin Catholic church music: the style of Palestrina, and the pedagogical approach of J. J. Fux's Gradus ad Parnassum. In addition, selected passages from A.F.J. Thibaut's book On Purity in Musical Art are discussed. Chapter three includes, in 42 tables, stylistic analyses for twenty compositions, including music for the Mass, music for the Office, and an in-depth study of Pearsall's largest work, the Requiem. The concluding chapter discusses Pearsall's position in the German reform movement and in the Romantic era in general, and attempts to define the stylistic tendencies in his Latin church music. The appendices include passages from Pearsall's writings on composition style and practice, a summary of music in Pearsall's personal library, and three examples of Pearsall's Latin Catholic church music in transcription.

Pearsall's Romantic spirit was characterized by an interest in the past and a search for purity which is evident in his Latin church compositions. Although he was not a major influence, Pearsall was an important link in the chain which was the German Catholic church music reform movement, and as such, deserves his long-overdue recognition.

# A COMPARISON OF TWO VARIATIONS OF A BEHAVIORAL MODEL APPROACH FOR TEACHING PITCH READING AT THE JUNIOR HIGH LEVEL: WITH KEYBOARD TRAINING OR WITHOUT KEYBOARD TRAINING

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This study was designed to compare the effectiveness of two variations of a single method of pitch reading instruction, (one with keyboard-concept training and one without). The purpose of this study was to compare the pitch reading scores of seventh grade students of differing word reading levels in a suburban school district who were taught score reading either with or without added keyboard training.

The sample was fifty-two seventh grade students from three intact general music classes. Class I was given pitch reading instruction with added keyboard concepts. Class II was given pitch reading instruction without keyboard concepts. Class III was a control group receiving no instruction during the research period.

A quasi-experimental pretest posttest equivalent materials design was used to generate the data. Data were analyzed by one-way ANOVA, correlated _t_ tests, and independent _t_ tests for statistical significance.

Both classes of students receiving instruction showed significant gains in pitch reading scores over students in the control group. No significant difference was found, however, in gains in scores between the two variations of pitch reading instruction. Students in the group instructed with added keyboard gained comparably in scores with those students instructed without keyboard despite the loss of two of ten

days of pitch reading practice time. The design of this study does not reveal whether keyboard knowledge was the reason this loss in practice time was overcome. High word reading level students receiving the two types of instruction gained significantly more in pitch reading scores than did low word reading level students. This could simply be an indication that the high word reading students are faster learners, or it could indicate that the approach used in this study favored the high word reading level students in some way.

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## THE ANALYSIS OF THE MUSIC AND EVOLUTION OF STYLE OF COMPOSER/SINGER/PIANIST, MOSE ALLISON

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The purpose of this study is fourfold. It is an attempt to condense the professional career of jazz/blues composer/singer/pianist, Mose Allison, and to recognize both his artistry and contribution to music. Secondly, it is a descriptive analysis of the music and poetry of a non-academician who is equally as skilled and musically educated. Thirdly, it is an investigative probe into those elements providing Allison with the fuel to establish and develop a style which has evolved into an unclassifiable, personal musical product. Finally, this study is an attempt to determine the values and philosophies embraced by Allison toward his art and career.

Mose Allison's music has never before been technically examined or analyzed. Allison is a self-taught player whose innate expertise, intelligence, wit, and genuine love for the spirit and meaning of music as artistic expression assisted him in transcending the blues style.

Several means were used in researching the topic. Personal taped interviews conducted at Allison's home were critical and the only means in which to arrive at definitive conclusions. Newspaper and magazine interviews supporting Allison's responses to personal interview questions were also used.

In addition to recordings, Allison provided the researcher with lead sheets of his compositions for musical analysis. Musical examples are treated utilizing traditional academic musical terminology. Text is approached analytically employing terminology common to literary criticism.

Generally, Mose Allison's music is not extraordinarily complicated. It features some orthodox musical practices, but has universality. It meets all of Allison's criteria of art. Allison's piano improvisation style is a melange of many styles. A good representation of this art is not currently available on recordings and stands the chance of being lost in the event that Allison can no longer play.

Mose Allison is an artist with great integrity. He has contributed to the promotion of the blues and jazz because he has the ability and skill as a performer to impart musical ideas with inventiveness and alacrity. His music has endured 35 years despite the trends in popular music.

# SELF EVALUATION OF PASTOR'S CHURCH MUSIC EDUCATION AND THE RESULTANT PHILOSOPHY OF MUSIC IN THE WORSHIP SERVICE

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The motivation of this study came from a concern for integrating music into the worship service. Evangelical churches do not have the guidelines given them for structuring a worship service, as do liturgical churches. Seminaries likewise give little preparation for fulfilling the music/worship aspect of the ministry.

The problem of this study, however, focuses on the pastor. Does the pastor who perceives himself as well prepared rank the music/worship influences in the same way and choose the same Music Worship Model as the Pastor who does not perceive himself well prepared in music/worship? The purpose of this study was to compare responses of selected pastors currently assigned to churches in the greater Kansas City area to determine the ranking of music/worship influences.

A questionnaire was designed by the researcher dealing with philosophy of Church music, biographical information on the pastor, and demographic information about the church's music program. This questionnaire was sent to all pastors (300) on the mailing list of Youth for Christ, Kansas City. There were 141 respondents representing 21 Protestant denominations and 35 seminaries.

Hypothesis 1 stated that there would be no significant differences ($p<.05$) between the ranking of the influences by the pastors who perceived themselves well prepared (WP) and those pastors who do not perceive themselves well prepared (NWP). Hypothesis 1 was rejected. However, the frequency level of the seminary influence was equally low for both the WP and the NWP pastors.

Hypothesis 2 stated that there would be no significant difference ($p<.05$) between Music Worship Models (MWM) chosen by pastors who perceived themselves to be well prepared and those who did not perceive themselves to be well prepared. Hypothesis 2 was not rejected. There was not a significant difference between the WP and NWP pastors' rating of the Music Worship Models.

Change is needed in the curriculum of seminaries. Because curriculum changes take place very slowly, a study needs to be done to develop an effective instrument for churches to evaluate their music/worship program.

## THE RELATIONSHIP OF THE ROLE AND SCOPE OF MUSIC ADMINISTRATORS IN HIGHER EDUCATION TO A MANAGERIAL AND LEADERSHIP MODEL

John V. Sinclair, Doctor of Musical Arts
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The purpose of this study was to describe the relationship of the role and scope of music administrators in higher education to a managerial and leadership model.

Data were collected via a questionnaire containing four sections. Section one was demographic in nature and listed nine music administration factors. Section two determined the music administrator's responsibilities, level of authority, and degree of involvement in executing the 108 tasks listed. Section three was a quiz determining the music administrator's adaptability to participative management techniques. Section four was a Situational Leadership test designed to identify the music administrator's leadership style.

The responding sample included 156 current higher educational music administrators. Results from sections one and two were reported using descriptive statistics. The null hypothesis associated with section two was tested by chi-square for statistical significance using the SPSS Statistical Package.

Of the 108 selected tasks, 106 were found to be responsibilities of the music administrator. Music administrators reported that when executing their tasks, partial authority was held 59% of the time and total authority was held 37% of the time. Jobs of the music executive are executed through sharing (35%), delegating (29%), personally completing (31%), and supervising (5%) responsibilities.

Responding music administrators regard themselves as Participative Managers. Scores on the Participative Management test indicated that music administrators perceive themselves as highly participation oriented in administering their music units. Other data suggest contradictions between music administrators' self-reported participative management level and actual participative management style.

The test's scores disclosed that the cumulative leadership style of music administrators indicated that they do not feel secure in their position and often do not have the ability to delegate responsibility. Leadership scores indicated that music administrators are adaptable and flexible.

Further study and research are needed in almost all areas of higher educational music administration. Five suggested research problems are listed at the conclusion of the study.

## A STUDY OF THE EFFECT OF SCALE DRILL ON MEMORY FOR MELODY IN COLLEGE MUSIC APPRECIATION STUDENTS

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The purpose of this study was to administer scale training drills to non-music major degree students enrolled at Northwest Missouri State University and compare their ability to identify melodic fragments as same or different with students who have not received instruction and with students who have been administered melodic memory practice with feedback but no instruction. Students were classified as experienced if they had two or more years of private lessons or instrumental ensemble experience. All others were classified as inexperienced.

A Melodic Memory Test was developed in order to measure the ability of subjects to identify pairs of melodic examples as same or different. Subjects were randomly assigned to one of three groups equally balancing experienced and inexperienced subjects within the groups. Group one received a four-part series of scale drill exercises and Group two received practice on a version of the test with feedback before taking the Melodic Memory Test. Group three received no training before taking the Melodic Memory Test. A 3X2 analysis of variance procedure for unequal cells was performed on the scores, the main factors being treatment ( 3 levels) and experience (2 levels).

No significant effect (.05 level) for treatment or interaction was observed; however, the effect of experience was significant ($p<.05$). Recommendations for future research included a replication of the study with a prolonged training period to reduce fatigue and allow more time for experience with tonal materials.

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## EDITOR'S NOTE

This issue of the Missouri Journal of Research in Music Education: Volume V., Number 5, will be the last to be so numbered. The next issue, Number 26, will be listed by the universal, whole number system. Coinciding with this change in numbering will be change in publication date which will be moved from autumn to spring. The editorial board believes these changes will eliminate confusion among subscribers concerning current issue availability. Under this plan, the subscription date will correspond more closely to the date of publication.

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# MISSOURI JOURNAL OF RESEARCH IN MUSIC EDUCATION

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# PREFACE

The Missouri Journal of Research in Music Education, published by the Missouri Music Educators Association, is devoted to the needs and interests of teachers of music in Missouri and the nation. This issue, Volume V, Number 5, is the twenty-fifth.

The members of the editorial committee are grateful to those readers who have written suggestions concerning the content of past issues and request that criticisms and suggestions again be sent to the editor concerning the content of this issue. We strive for a reasonable balance among music theory, history, philosophy, aesthetics and pedagogy.

We express our deep gratitude to the Missouri Music Educators Association for their financial support to make it possible to continue to publish the Missouri Journal of Research in Music Education.

The Editorial Board

The Missouri Journal of Research in Music Education (ISSN 0085-350X) is published annually by the Missouri Music Educators Association. Copies can be obtained by sending $2.00 (cash, check, or money order, payable to Missouri Music Educators Association) to the editor. Inquiries relating to the availability and cost of back issues should be directed to the editor.

# THE USE OF AN OBJECTIVELY CONSTRUCTED RATING SCALE FOR THE EVALUATION OF BRASS JURIES: A CRITERION-RELATED STUDY

Martin J. Bergee
University of Missouri-Columbia

Objective measurement of musical performance is an ongoing concern among music educators. Music performance is a behavior whose complex and interrelated constituents often are difficult to identify. Therefore, most current performance measurement has a highly subjective basis. Whybrew (1971) wrote on the subject in these pessimistic tones:

> Music performance, because of its very nature, is extremely difficult to evaluate reliably. Not only is it a highly complex affair, but certain aspects of it have so far defied precise definition, to say nothing of precise measurement. Although [the hope was expressed] some years ago that ways would be found to evaluate musical performances through objective measurement, no such techniques have been devised as yet, and it seems unlikely that they will be. (p. 190)

But performance measurement continues to be an everyday occurrence at all levels of music education. Today's educational climate seems to be calling for more rigorous and measurable standards, and it would greatly benefit music education if performance measures displaying good reliability and validity were developed.

There exist several attempts to develop vocal and instrumental performance measures using a priori criteria as a basis. Bostrom (1976) developed a scale to evaluate the piano performance of students auditioning for entrance into a major university music school. Sagen (1983) developed a Band Performance Rating Scale to assess the effects of recorded aural models on a university concert band's ensemble performance skills.

Three investigators have developed wind instrument performance measures. Kruth (1973) constructed a lengthy evaluation instrument for clarinet based on specific performance objectives. A flute measure (Boulton, 1974) also was based on a set of carefully developed performance objectives. Kidd (1975) constructed and validated a scale of trombone performance skills for application at the elementary and junior high school levels. These measures, each one a valuable addition to the performance measurement repertoire, based their construction to one degree or another on subjective paradigms. Several are tied to a specific set of objectives and are not intended to be used as measures of overall performance.

The Watkins-Farnum Performance Scale (WFPS) (Watkins & Farnum, 1954), thus far the only published performance measure, has been used extensively for measuring wind instrument performance. In an attempt to objectify the scale, the authors considered only those factors which lend themselves to quantification, while more subjective factors such as tone quality were ignored. Information on reliability and validity is published in the test manual.

Because of its purported objectivity, the WFPS has been used extensively as a dependent variable in research studies. Some investigators have used the WFPS as a posttest (e.g. Edwards, 1978; Jacobs, 1985), others have used the scale as one of several dependent measures (e.g. Groeling, 1975; Gordon, 1977), while still others have used it to measure sightreading performance (e.g. Elliott, 1982). In spite of its extensive use, the lack of criteria addressing more subjective, yet quite important, performance factors calls the validity of the WFPS into question. Stivers (1972), who extensively examined the reliability and validity of the WFPS, suggested that the scale is most effective as a measure of sightreading performance.

Some researchers have attempted to construct performance measures with a strong empirical basis. Believing that factor analysis was a desirable method for structuring evaluation of complex behaviors, Abeles (1971) employed it to develop a clarinet performance rating scale. Other rating scales using this approach soon were developed. In addition to Abeles' clarinet scale, other performance measures originating from a factor analysis structure include one for high school chorus (Cooksey, 1974), high school band (DCamp, 1980), snare drum (Nichols, 1985), and high school vocal solo (Jones, 1986). The present investigator (Bergee, 1987) used factor analysis to develop a rating scale for euphonium and tuba performance, The Euphonium-Tuba Performance Rating Scale (ETPRS).

## The ETPRS

To develop the ETRPRS, the investigator gathered statements descriptive of euphonium-tuba performance from essays, adjudication sheets, and previous performance measurement research. A content analysis of these materials yielded 112 statements, which were translated into items and paired with a five-option, Likert-type scale whose components included SD (strongly disagree), D (disagree), N(neither agree nor disagree), A (agree), and SA (strongly agree). The 112-item pool was used by 50 judges to evaluate 100 euphonium and tuba performances. The obtained data were factor analyzed, initial orthogonal factors were extracted, and the structure was rotated to a terminal solution. Five factors were identified, and 30 items were initially chosen to define the subscales of the ETPRS (see Bergee, 1987, pp. 92-93).

To examine the stability of the ETPRS structure, and to obtain data for interjudge reliability and criterion-related validity, three panels of 10 judges used the ETPRS to rate three sets of 10 different euphonium and tuba performances. The data obtained were factor analyzed and the ETPRS was revised to a four-factor, 27-item structure. The four factors identified for the revised ETPRS were (a) Interpretation/Musical Effect, (b) Tone Quality/Intonation, (c) Technique, and (d) Rhythm/Tempo. Table 1 presents the ETPRS randomly ordered and paired with a five-option, Likert-type scale. Interjudge reliability estimates for the ETPRS total scores were .944, .985, and .975 for the three groups of judges respectively. Reliability estimates for subscales ranged from .894 to .992.

## Table 1

## 27-Item ETPRS

Judge Number _____

Please use the items below to describe as accurately as possible the performances which you will hear. Respond by indicating the extent to which you believe the statements to be descriptive of the performance. Use the following five-point scale:

SD - strongly disagree that the statement describes the performance.

D - slightly disagree that the statement describes the performance.

N - neither agree nor disagree that the statement describes the performance.

A - slightly agree that the statement describes the performance.

SA - strongly agree that the statement describes the performance.

Please respond to each statement. Choose only one response to each statement. Circle responses.

SD D N A SA 1. Performer plays mechanically.

SD D N A SA 2. Spiritless playing.

SD D N A SA 3. Intonation is inconsistent.

SD D N A SA 4. Plays all registers in tune.

SD D N A SA 5. Performance is clean.

SD D N A SA 6. Poor synchronization of tongue and fingers.

SD D N A SA 7. Interval leaps are smooth.

SD D N A SA 8. Rhythm flows.

SD D N A SA 9. Superior interpretation.

SD D N A SA 10. Pitch suffers from poor tone production.

SD D N A SA 11. Good intonation at forte volume.

SD D N A SA 12. Lack of clarity in tongued passages.

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SD D N A SA 13. Rhythmically accurate.

SD D N A SA 14. Articulation is clean and not percussive.

SD D N A SA 15. Plays rhythms unmusically.

SD D N A SA 16. Ineffective musical communication.

SD D N A SA 17. Neglects style and expression.

SD D N A SA 18. No contrasts in performance.

SD D N A SA 19. Good spirit and drive.

SD D N A SA 20. Tempo not controlled.

SD D N A SA 21. Precise attacks and releases.

SD D N A SA 22. Loud passages rhythmically unsteady.

SD D N A SA 23. Rhythm is unsteady.

SD D N A SA 24. Plays too hurriedly.

SD D N A SA 25. Sound is thin.

SD D N A SA 26. Sound in upper register is pinched and restricted.

SD D N A SA 27. Dynamics are played.

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Two studies examined the criterion-related validity of the ETPRS. In the first, ETPRS evaluations were compared with global ratings obtained via a magnitude estimation procedure. Zero-order correlation coefficients between ETPRS total scores, subscale scores, and global criterion scores ranged from .502 to .992; most were above .850. To examine the contributions of the subscale scores in predicting the global criterion, a multiple regression analysis was performed. In the second criterion-related validity study, the MENC adjudicating ballot for wind instrument solo was used as the criterion. The same procedures used in the first criterion-related study were applied: correlation coefficients ranged from .823 to .992.

## Purpose of the Study

The investigator surmised that the generally high reliability coefficients the ETPRS exhibited may have been an artifact of the investigative procedure. Performances randomly selected for administering the ETPRS tended to be either quite good or quite poor; a relatively small number were in the middle achievement range. The extreme heterogeneity of performance quality may have unduly inflated reliability. This investigation sought to determine whether a more homogenous group of performances would affect reliability in a substantial manner.

Furthermore, a perusal of ETPRS items shows that none are idiosyncratic to euphonium-tuba performance. After discussing the ETPRS with several brass specialists, it seemed that the scale could serve as a dependable performance measure for all brass instruments. If this is indeed so, the ETPRS should function well in a "real-life" brass performance situation. In addition, the ETPRS investigation's use of 10 judges per performance group may be impractical for many performance evaluation circumstances. Vasil

(1973) demonstrated that groups of 3-5 judges displayed adequate reliability. He pointed out that fewer than three resulted in too much rater subjectivity, whereas greater than five did not substantially improve reliability figures. It seemed to this writer that university brass juries provided an opportunity to study all three of the above-mentioned situations, viz., (a) a group of performers of more homogenous ability, (b) a group wherein all brass instruments are represented, and (c) fewer judges, yet enough to achieve stable reliability estimates.

Specifically, this investigation sought to determine the following:

1. What is the interjudge reliability of the ETPRS when used as an evaluative instrument for university brass juries?

2. To what extent do judges' rankings, according to ETPRS scores, concur?

3. Using applied brass jury grades as the criterion, what is the criterion-related validity of the ETPRS?

4. To what extent are ETPRS scores predictive of applied brass jury grades?

## Procedure

At the conclusion of the fall 1987 academic semester, five brass instructors at a major midwestern university (two trumpetists, one hornist, one trombonist, and one tubist) were asked to evaluate one day's brass jury performances using the ETPRS. These performances were also evaluated in the usual manner; that is, each instructor wrote out an evaluation of the performance and assigned a letter grade.

Twenty-four university brass players' jury performances were evaluated. Of these 24, 17 were undergraduate music or music education majors, four were undergraduate nonmusic majors, two were graduate students in music education, and one was a graduate student in music performance. Eight of the performers were trumpetists, seven were hornists, three played trombone, four were euphoniumists, and two played tuba. The judges were asked to use ETPRS items to rate the performances as accurately as possible. They were cautioned to read each item carefully since the scale contained positive and negative statements arranged in random order (see Table 1). The ETPRS approximately 3 minutes per performance to complete.

Scores were assigned to positive state ETPRS items in the following manner: Strongly Agree, 5 points; Agree, 4 points, Neutral, 3 points; Disagree, 2 points; and Strongly Disagree, 1 point. Scores were reversed for the negatively stated items. Jury grades were assigned in the usual ABCDF format. The following scale was used to quantify the letter grades: F, 0 points; D-, 1 point; D, 2 points; D+, 3 points; C-, 4 points; C, 5 points; C+, 6 points; B-, 7 points; B, 8 points; B+, 9 points; A-, 10 points; and A, 11 points.

Interjudge reliability estimates for both ETPRS scores and jury grades were obtained by the Hoyt analysis of variance procedure (Hoyt, 1941). To examine the degree of agreement among judges concerning the ranking of performances obtained via ETPRS scores, Kendall's Coefficient of Concordance, W, was applied to the results.

Within the obtained data, zero-order correlation coefficients were obtained between ETPRS results and jury grades. To examine the contribution of ETPRS scores in predicting the jury grade outcome, a stepwise multiple regression analysis was performed within the

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data set. Analysis was performed on an IBM 4381-14 mainframe computer using the SPSS$^X$ (SPSS, Inc., 1983) program REGRESSION. Because of the relatively small sample of judges, an adjustment for bias in the multiple correlation was obtained.

## Results and Discussion

Table 2 presents interjudge reliability estimates, obtained via the Hoyt technique, for ETPRS subscale and total scores. Although these reliability estimates are somewhat lower than estimates obtained in the original ETPRS study, most are still quite substantial. The high estimate obtained for total scores is especially important and compares to the interjudge reliability estimate obtained for jury grades ($r = .943$). The high reliability estimate obtained for the Interpretation/General Effect factor is consistent with results obtained in previous research. Reasons may include: (a) the Factor 1 subscale contains the largest number of items, and (b) a study of performance measurement research using factor analysis shows a tendency for judges to perceive the musical/interpretive factor as a kind of *g* factor of musical performance (see, for example, Abeles, 1971, p. 43). Somewhat lower reliability estimates obtained for Factor 2 and 3 data may be due to (a) use of fewer judges than the original study, (b) comparatively fewer items whereby decisions can be made, and (c) the subjectivity inherent in these factors.

## Table 2

## Interjudge Reliability Estimates for ETPRS Subscale and total Scores

| | |
|---|---|
| Factor 1:<br>Interpretation/Musical Effect | .909 |
| Factor 2:<br>Tone Quality/Intonation | .805 |
| Factor 3:<br>Technique | .745 |
| Factor 4:<br>Rhythm/Tempo | .858 |
| Total<br>Score | .919 |

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Kendall's W was used to determine the measure of agreement in judges' ranking of performances. The obtained W was .729, indicating a substantial degree of agreement. With a large N (in this study, N=24) the formula whereby W is calculated is approximately distributed as chi square; that is to say, the probability associated with the occurrence under $H_0$ of any value as large as an observed W may be determined by finding chi square (Siegel, 1956, pp. 236-237). One may thus test the obtained W for significance. The obtained chi square indicates that it is highly unlikely W occurred by chance ($x^2=83.84$, df=23, $p<.001$). [$X^2(23,N=24)=83.84$, $p<.001$].

Zero-order correlation coefficients between ETPRS scores and the jury grades appear in Table 3. The coefficient between ETPRS total scores and jury grades is .912, suggesting a high degree of positive relationship. Correlations between ETRPS subscale scores and jury grades range from .872 to .896. Interestingly, coefficients among subscale scores are slightly, yet consistently, higher than coefficients between subscale scores and jury grades. Evidence of a substantial interrelationship between subscale factors was found in the original study despite a structure determined by factor orthogonality.

# Table 3

## Zero-Order Coefficients
## ETPRS Scores-Jury Grades

| | FACTOR1 | FACTOR2 | FACTOR3 | FACTOR4 | TOTAL | JURY |
|---|---|---|---|---|---|---|
| FACTOR1 | 1.000 | .922 | .912 | .953 | .979 | .896 |
| FACTOR2 | .922 | 1.000 | .929 | .934 | .969 | .887 |
| FACTOR3 | .912 | .929 | 1.000 | .936 | .964 | .888 |
| FACTOR4 | .953 | .934 | .936 | 1.000 | .980 | .872 |
| TOTAL | .979 | .969 | .964 | .980 | 1.000 | .912 |
| JURY | .896 | .887 | .888 | .872 | .912 | 1.000 |

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To examine the contributions of the subscale scores in predicting the jury grade outcomes, a stepwise multiple regression analysis was performed on the obtained data. Subscale scores served as independent variables, while jury grades served as the dependent variable. Multiple regression analysis yields two figures: a squared multiple correlation ($\underline{R}^2$), which indicates the proportion of variance of the dependent variable accounted for by the combined independent variables, and a regression coefficient ($\underline{b}$) for each independent variable. The $\underline{b}$'s consider each independent variable while controlling for the other independent variables. An independent variable is entered into the stepwise equation if it accounts for a substantial proportion of the total variance. Table 4 reports the multiple regression outcomes. The adjusted $R^2$ of .823 ($\underline{p}<.001$) indicates that a large proportion of the variance in the jury grades could be accounted for by the ETPRS scores. Therefore, the ETPRS subscale scores in combination could serve as dependable predictor of these jury grades. None of the individual factors, however, were entered into the multiple regression equation.

## Table 4

## Stepwise Multiple Regression
## Applied Jury Scores as Criterion

```
Multiple R              .91166        Analysis of Variance
R Square                .83115                            DF       Sum of Squares      Mean Square
Adjusted R Square       .82348        Regression           1            730.18062        730.18062
Standard Error         2.59659        Residual            22            148.33036          6.74229

                                      F =      108.29866        Signif F = .0000
```

(< .001)

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The ETPRS appears to display good reliability and criterion-related validity as an evaluative instrument for overall brass performance. Furthermore, judges using the ETPRS as an overall brass performance measure believed that the scale adequately represented major aspects of brass playing.

The ETPRS thus has the values of being empirically-based, inclusive, reliable, and valid. The scale is easy to use, flexible, and objectively constructed; it yields both descriptive and quantitative information and is thus quite manipulable. Moreover, the ETPRS has the advantage of being readily available: there are no copyright restrictions, costs are limited to copying, and there are no difficult-to-secure scoring materials. The scale demonstrates effective evaluation of multiple levels of brass performance. The numerous occasions in music education where brass performance is evaluated, from daily playing exams to district- and state-level festivals, could be greatly improved in terms of thorough, expedition, and fairness.

Performance measurement research, however, remains in a pioneer stage of development. Results of the present investigation further substantiate the efficacy of empirically-based rating scales. Future investigation in this area should focus on developing other empirically-based performance measures and enhancing the reliability and validity of those already in existence.

## References

Abeles, H. F. (1971). An application of the facet-factorial approach to scale construction in the development of a rating scale for clarinet music performance. (Doctoral dissertation, University of Maryland). Dissertation Abstracts International, 32, 5820A. (University Microfilms No. 72-12, 825)

Bergee, M. J. (1987). *An application of the facet-factorial approach to scale construction in the development of a rating scale for euphonium and tuba music performance*. Unpublished doctoral dissertation, University of Kansas.

Bostrom, S. J. (1976). The establishment of the content validity and the estimation of the reliability of a scale developed to evaluate piano performance (Doctoral dissertation, University of Southern California). *Dissertation Abstracts International*, *37*, 1286A.

Boulton, J. B. (1974). A performance test of flute tone production, intonation, and dexterity (Doctoral dissertation, University of Kansas). *Dissertation Abstracts International*, *35*, 6177A. (University Microfilms No. 75-6158)

Cooksey, J. M. (1974). An application of the facet-factorial approach to scale construction in the development of a rating scale for high school choral performance (Doctoral dissertation, University of Illinois). *Dissertation Abstracts International*, *35*, 7942A. (University Microfilms No. 75-11,878)

DCamp, C. B. (1980). An application of the facet-factorial approach to scale construction in the development of a rating scale for high school band performance (Doctoral dissertation, University of Iowa). *Dissertation Abstracts International*, *41*, 1462A. (University Microfilms No. 8022012)

Edwards, B. L. (1978). An investigation of the relationship between selected teacher behaviors and achievement in beginning wind instrumental music classes as measured by the *Watkins-Farnum Performance Scale*. (Doctoral dissertation, University of Connecticut). *Dissertation Abstracts*

International, 38, 5979A-5980A. (University Microfilms No. 7803681)

Elliott, C. A. (1982). The relationships among instrumental sight-reading ability and seven selected predictor variables. Journal of Research in Music Education, 30, 5-14.

Gordon, M. V. (1977). The effect of contingent instrumental music instruction on the language reading behavior and musical performance ability of middle school students. Doctoral dissertation, Teachers College, Columbia University). Dissertation Abstracts International, 38, 4645A. (University Microfilms No. 7732025)

Groeling, C. R. (1975). A comparison of two methods of teaching instrumental music to fourth grade beginners. (Doctoral dissertation, Northwestern University). Dissertation Abstracts International, 36, 4319A. (University Microfilms No. 75-29, 644)

Hoyt, C. (1941). Test reliability obtained by analysis of variance. Psychometrika, 6, 153-160.

Jacobs, J. D. (1985). The effects of musically expressive supplementary material on the attitude, performance progress, musical achievement, and intended continuance of beginning band students. (Doctoral dissertation, University of Alabama). Dissertation Abstracts International, 46, 3644A. (University Microfilms No. DA8600765)

Jones, H., Jr. (1986). An application of the facet-factorial approach to scale construction in the development of a rating scale for high school vocal solo performance. (Doctoral dissertation, University of Oklahoma). Dissertation Abstracts International, 47, 1230A. (University Microfilms No. DA8613727)

Kidd, R. L., III (1975). The construction and validation of a scale of trombone performance skills. (Doctoral dissertation, University of Illinois). Dissertation Abstracts International, 36, 5905A. (University Microfilms No. 75-6158)

Kruth, E. C. (1973). A suggested technique for evaluating wind instrument performance [sic] with particular application to the clarinet. Journal of Band Research, 10(1), 24-36.

Nichols, J. P. (1985). A factor-analysis approach to the development of a rating scale for snare drum performance. (Doctoral dissertation, University of Iowa). Dissertation Abstracts International, 46, 3282A. (University Microfilms No. DA8527988)

SPSS Inc. (1983). SPSS$^{X}$ user's guide. New York: McGraw-Hill.

Sagen, D. P. (1978). The effects of recorded aural models on the ensemble performance skills of a university concern band. (Doctoral dissertation, University of Iowa). Dissertation Abstracts International, 39, 4799A. (University Microfilms No. 7902941)

Siegel, S. (1956). Nonparametric statistics for the behavioral sciences. New York: McGraw-Hill.

Stivers, J. D. (1972). A reliability and validity study of the Watkins-Farnum Performance Scale. (Doctoral dissertation, University of Illinois). Dissertation Abstracts International, 34, 815A-816A. (University Microfilms No. 73-17, 440)

Vasil, T. (1973). The effects of systematically varying selected factors on music performing adjudication. (Doctoral dissertation, University of Connecticut).

Dissertation Abstracts International, 34, 3950A-3951A. (University Microfilms No. 74-20, 110)

Watkins, J. G., & Farnum, S. E. (1954). The Watkins-Farnum performance scale. Winona, MN: Hal Leonard.

Whybrew, W. E. (1971). Measurement and evaluation in music education. (2nd ed.). Dubuque, IA: William C. Brown.

# THE EFFECT OF TRADITIONAL MUSIC CLASS VERSUS REPEATED LISTENING ON THE MUSIC PREFERENCES OF KINDERGARTEN AND PRIMARY GRADE CHILDREN

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In recent years, numerous studies have investigated the music "preferences" and "opinions" (Price, 1986, p. 154) of preschool and elementary age children (Greer, Dorow, & Randall, 1974; LeBlanc, 1979, 1981; Leblanc & McCrary, 1983; LeBlanc & Cote, 1983; May, 1985; Sims, 1987). The results of these studies indicate that children prefer music with fast tempos over music with slow tempos and that children's preference for non-popular music declines with age. By first grade, or even earlier, children begin to prefer popular styles of music to the exclusion of others (May, 1985).

Studies by Hargreaves (1984) and Peery and Peery (1986) investigated the influence of repetition and exposure on children's music preferences. Their findings support the inverted U theory of music familiarity and preference (Hargreaves, 1984) and also indicate that very young children have equal preferences for popular and classical music until about age five. Peery and Peery (1986) reported, "what you don't hear, you come to like less well" (p. 30). Five-year-old children's preferences for classical music declined, over a period of 10 months, when the children were not exposed to classical music.

The purpose of this study was to compare the effects of traditional elementary music instruction and repeated exposure on the musical preferences of kindergarten and primary grade children. Whereas Peery and Peery (1986) compared classical music appreciation instruction to no music instruction, the present study compared traditional elementary music instruction to repeated exposure.

This study attempted to answer the following questions. (1) What effect does traditional elementary general music instruction have on children's preferences for selected styles of music? (2) What effect does repeated exposure to classical music--with no instruction--have on children's preferences for selected styles of music?

## Procedures

Fourteen kindergarten students--ages 4 and 5--and 11 first and second grade students--ages 6, 7, and 8--from a parent-cooperative school participated in the study. Music classes met twice weekly for 30 minutes each meeting and music instruction consisted of lessons from the Silver Burdett Series (Aubin, Crook, Hayden, & Walker, 1985), Hap Palmer songs (1974), and movement activities and other activities designed to develop children's conceptual knowledge of music.

At the beginning of the school year students were administered a test designed to measure preferences for three different styles of music: classical (Mozart Piano Concertos), music composed for children (Hap Palmer), and jazz (Wynton Marsalis and others). Following 5 weeks of traditional music instruction and a second administration of the preference test, traditional music lessons were discontinued. Students were then exposed to 5 weeks of repeated listenings of Mozart's Piano Concerto in D (K.537). These repeated listenings occurred during the time reserved for the regularly scheduled music class. Students were only informed that they were listening to Mozart's Piano Concerto in D. No other music instruction was given. The students were allowed to listen quietly, and perform art activities. No reference was made to the music playing during art activities.

After five weeks of repeated listening, the students were again administered the music preference test and traditional music instruction was resumed. The regular music teacher and three student teachers taught music as at the beginning of the school year. After five weeks, a final administration of the music preference test was conducted. The design of the study follows:

O X1 O X2 O X1 O

O = Administration of the preference test
X1 = Tradition elementary school music classes (Silver Burdett, Hap Palmer, etc.)
X2 = Repeated listening (Mozart's Piano Concerto in D (K.537)

The music preference test was designed and administered following the procedures of Sims (1987), who reported the overall reliability of this type of test to be adequate and comparable to reliability indicators reported in other research. The test included 15 selections arranged in random order with each selection averaging 30 seconds in length. The time of each example varied according to the feeling of phrase completion or closure in the music. Table 1 lists the musical excerpts used on the preference test in the order of their presentation with the tempos of their basic pulse.

The Hap Palmer excerpts were chosen to represent an example of one style of music that is used in music classes for children. It was realized that children are exposed to many other styles of music in the elementary music class. The jazz excerpts were chosen because they were believed to be unfamiliar to the students in the study. Mozart represented the classical style and piano concertos were used to control for variety within the classical idiom.

Table 1

*Order and Tempos of Music Excerpts on Preference Test*

| Excerpt | Tempo |
|---|---|
| 1. Mozart Piano Concerto in D K.537 | 156 |
| 2. Toots Thielman Quartet, Bluesette | 144 |
| 3. Wynton Marsalis, Stardust | rubato (slow) |
| 4. Mozart Piano Concerto in Bb, K. 595 | 120 |
| 5. Hap Palmer, Walking Notes | 120 |
| 6. Miles Davis, Bitches Brew | 120 |
| 7. Mozart Piano Concerto in D, K. 537 | 84 |
| 8. Carmen McRae, Blues vocal | 84 |
| 9. Hap Palmer, Fast and Slow March | 156 |
| 10. Mozart Piano Concerto in Bb, K. 595 | 120 |
| 11. Mozart Piano Concerto in Bb, K. 595 | 60 |
| 12. Toots Thielman Quartet, Velas | 72 |
| 13. Grover Washington Jr., Easy Lovin You | 108 |
| 14. Hap Palmer, Walking Notes vocal | 120 |
| 15. Mozart Piano Concerto in D K. 537 | 72 |

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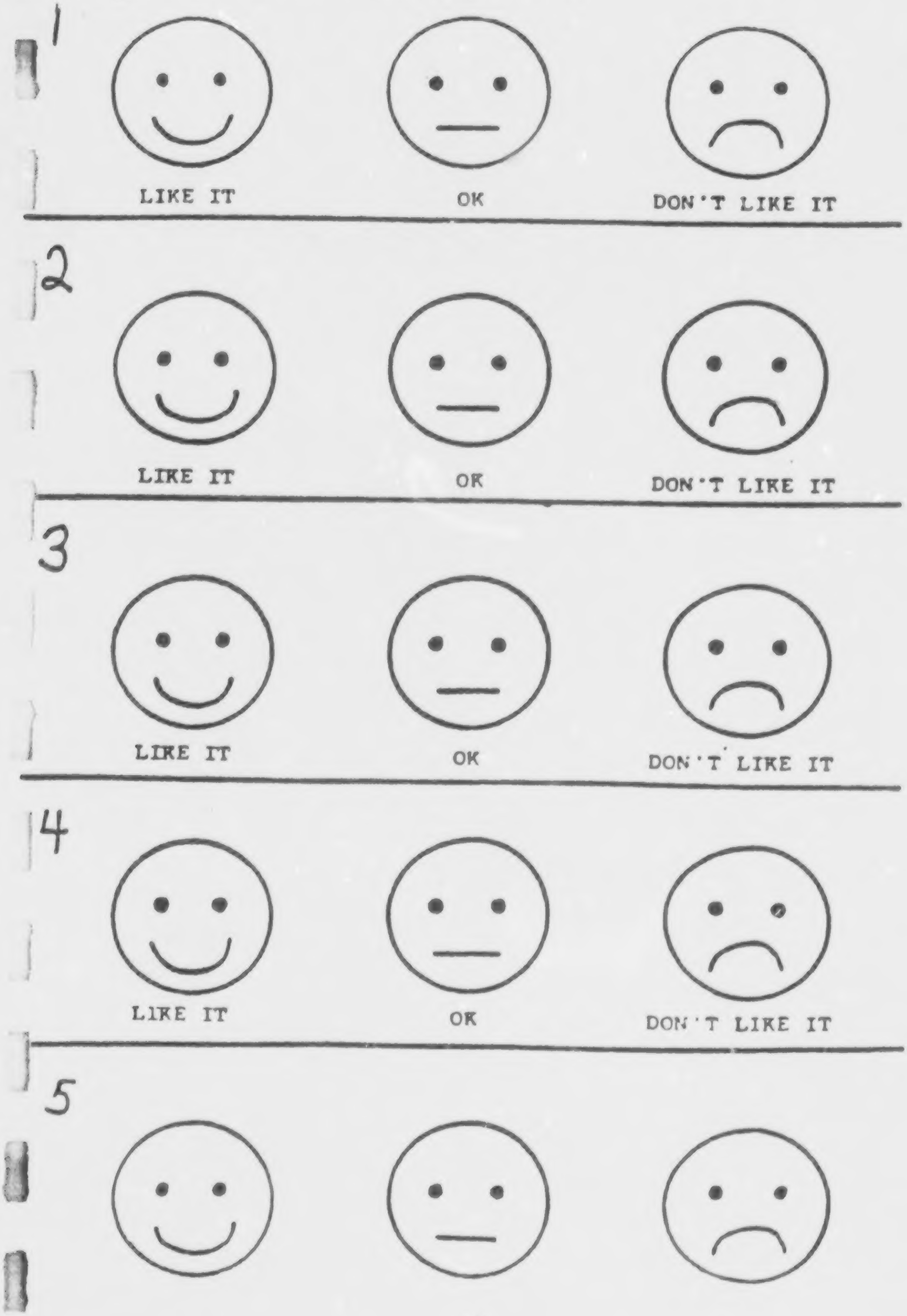
For each musical example heard, students were given the option of three pictographic responses: a happy face, neutral face, or an unhappy face respectively (see Figure 1). As a motivation device, children were allowed to draw a nose on the face which represented their response to the given musical example (sims, 1987). Each administration of the test was conducted by one of the researchers and an assistant.

Figure 1. Music Preference Test


1
LIKE IT
OK
DON'T LIKE IT
2
LIKE IT
OK
DON'T LIKE IT
3
LIKE IT
OK
DON'T LIKE IT
4
LIKE IT
OK
DON'T LIKE IT
5

## Results

Independent $t$-tests between groups' ratings for each style on each test revealed no significant differences ($p>.05$) between groups in their ratings for each style of music. Subsequently, the data were collapsed across groups and examined for treatment effect.

The data appear to support previous reports concerning the influence of tempo on young children's music preferences. Both groups preferred fast (pulse > 80) over slow tempo (pulse < 80) selections on each of the four preference tests ($t$ 1=-2.8, $t$ 2=-2.3, $t$ 3=-5.0, $t$ 4=-4.0; $p<.05$. Comparisons of the rating data were subsequently restricted to ratings of fast tempo selections.

Table 2 includes the results of dependent $t$-tests between students' ratings of each style for Test 1 versus 2, Test 2 versus 3, and Test 3 versus 4. The only significant difference between test ratings for style was for jazz between Test 1 and 2.

Table 2

Dependent t-tests by Styles Between Tests (N=25)

| Style | Mean Gain | T |
|---|---|---|
| Test 1 vs 2 | | |
| Mozart | .110 | 1.161 |
| Palmer | .133 | 1.789 |
| Jazz | -.173 | 2.487* |
| Test 2 vs 3 | | |
| Mozart | -.040 | .362 |
| Palmer | -.173 | 1.762 |
| Jazz | .053 | .700 |
| Test 3 vs 4 | | |
| Mozart | -.130 | 1.341 |
| Palmer | .067 | .612 |
| Jazz | -.001 | .001 |

*$p < .05$

A perusal of the means for each style on each test reveals that preferences for jazz declined between Tests 1 and 2 (see Table 3). Evidently, treatment did not significantly affect students' preferences for Hap Palmer or Mozart piano concertos. Interestingly, the mean ratings across all styles, with three being the maximum, are high and similar.

Table 3

Style Means for Each Test

| Test | Style | Mean |
|---|---|---|
| 1 | Mozart | 2.42 |
| | Palmer | 2.48 |
| | Jazz | 2.62 |
| 2 | Mozart | 2.56 |
| | Palmer | 2.62 |
| | Jazz | 2.46 |
| 3 | Mozart | 2.52 |
| | Palmer | 2.47 |
| | Jazz | 2.50 |
| 4 | Mozart | 2.40 |
| | Palmer | 2.50 |
| | Jazz | 2.50 |

## Discussion

This study attempted to answer two questions. (1) What effect does traditional music instruction have on kindergarten and primary school students' preferences for selected styles of music? (2) What effect does repeated exposure to classical music have on kindergarten and primary school students' preferences for selected styles of music?

The results of this study indicate that neither traditional music instruction nor repeated exposure had an effect on student preference for Hap Palmer or Mozart piano concertos. Traditional music classes appeared to have a negative effect on children's preferences for jazz in this study, although this finding could be a statistical anomaly.

In contrast, Peery and Peery (1986) did find an effect for instruction on student preferences for classical music. However, the instruction in the Peery study appeared to differ from what one might observe in a traditional kindergarten or primary grade class. Additionally, the students in the Peery study were given consistent reinforcement for their interactions with classical music. Reinforcement has been demonstrated to be an effective technique to affect music preference (Greer, 1981). The use of reinforcement was not controlled nor monitored in the present study.

Traditional elementary school music classes using music textbook series and music specifically composed for children may not have positive effects on student preferences for music in the formal tradition. Instead, as others have reported, what students don't hear, they like less (Peery & Peery, 1986). In this study student preferences for jazz declined over a period of traditional music instruction. Jazz was not part of this particular curriculum.

Hargreaves (1984) and others have reported the inverted U effect of repeated listening and music preferences. If this effect occurred in the present study, the students reached their optimal level of familiarity with Mozart piano concertos before or during the repeated listening section of treatment. Thus, their preferences may have leveled off or declined as a result of the repeated exposure treatment. One may question whether 4- to 8-year-olds are that familiar with Mozart. Nevertheless, this study and others indicate that there is still much to learn about music instruction and musical attitudes.

Caution is urged in interpreting the findings of this study; the sample was somewhat select and small. However, if the findings of this study are valid, important implications for music education are evident. If music educators wish to influence student preferences or appreciation for music of the formal tradition, they might consider directing their instruction toward that goal. Future research should investigate and describe relations between music education as currently practiced and children's musical attitudes.

## References

Aubin, N., Crook, E., Hayden, E., & Walker, D. S. (1985). Silver Burdett music centennial edition. Morristown, NJ: Silver Burdett.

Gree, R. D. (1981). An operant approach to motivation and affect: Ten years of research in music learning. In Documentary Report of the Ann Arbor Symposium: National Symposium on the Application of Psychology to the Teaching and Learning of Music (pp. 102-121). Reston, VA: Music Educators National Conference.

Greer, R. D., Dorow, L. G., & Randall, A. (1974). Music listening preferences of elementary school children. Journal of Research in Music Education, 22(4), 284-291.

Hargreaves, D. J. (1984). The effects of repetition on liking for music. Journal of Research in Music Education, 32(1), 35-47.

LeBlanc, A. (1979). Generic style music preferences of fifth-grade students. Journal of Research in Music Education, 27(4), 255-270.

LeBlanc, A. (1981). Effects of style, tempo, and performing medium on children's music preference. Journal of Research in Music Education, 29(2), 143-156.

LeBlanc, A. & Cote, R. (1983). Effects of tempo on children's music preference. Journal of Research in Music Education, 31(1), 57-66.

LeBlanc, A. & McCrary, J. (1983). Effect of tempo on children's music preference. Journal of Research in Music Education, 31(4), 283-294.

May, W. V. (1985). Musical style preferences and aural discrimination skills of primary grade school children. Journal of Research in Music Education, 33(1), 7-22.

Palmer, H. (1974). The feel of music. Freeport, NY: Educational Activities.

Peery, J. C. & Peery, I. W. (1986). Effects of exposure to classical music on the musical preferences of preschool children. Journal of Research in Music Education, 34(1), 24-33.

Price, H. E. (1986). A proposed glossary for use in affective response literature in music. Journal of Research in Music Education, 34(3), 151-159.

Sims, W. L. (1987). Effect of tempo on music preference of preschool through fourth grade children. In Madsen, C. K. & Prickett, C. A. (Eds.), Applications of Research in Music Behavior (15-25). Tuscaloosa, AL: University of Alabama Press.

# THE USE OF REHEARSAL TIME BY AN EXPERIENCED CHORAL CONDUCTOR WITH A CHILDREN'S CHOIR

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In the recent past, several investigators have studied the use of teaching time in classroom and ensemble settings. Systematic investigation has developed observation forms that record precise frequencies of teachers' interactions with students (Madsen & Madsen, 1981). In 1974, Kuhn used systematic observation forms to determine that music educators who are high approving maintain high student attentiveness. The apparent positive influence of teacher praise on student attentiveness, indicated in some research (Kuhn, 1974; Forsythe, 1977; Madsen & Alley, 1979), seems of paramount importance to all educators.

Murray (1974) developed a form to indicate the frequency of choral conductor approvals and disapprovals as well as the number of students off-task. The observation tool by Murray was also used to determine the amount of time spent in (a) instruction, (b) performance by the entire ensemble, and (c) performance by choral sections.

Yarbrough (1975) created and tested a Music Conductor Observation Form to measure frequency of extra-musical, conductor responses such as teacher/group activity, facial expressions, eye contact, and voice volume. Yarbrough found that choral conductors who use interactions of a high intensity with a chorus developed highly positive student attitudes.

Coker (1976) developed the (Georgia Assessment of Teacher Effectiveness form to record observations of demonstrated teacher competencies. Two areas of the form which were investigated in this study were (a) time on task and (2) correct student response to teacher-originated questions. Furthermore, Coker (1976) and McDonald (1976) isolated academic feedback as the strongest and most effective influence on student achievement out of several variables reviewed.

A study in private piano tutoring found that 30% of the time was spent on nonmusic activities (Geringer & Kostka, 1984). Sang (1986) noted that beginning instrumental conductors spent 40% of teaching time talking, 26% of the time modeling, and 34% of the time having pupils play their instruments. Wagner and Strul (1979) investigated how elementary music educators used teaching time by observing 27 beginning and experienced teachers. The data indicated that less experienced music teachers spent significantly more time giving directions to students.

Watkins (1986) observed that high school choral conductors spent nearly half their rehearsal time talking to the choirs and the remainder of the time directing choral singing. Watkins further found that the choral conductors used 12.4% of rehearsal time modeling for students and maintained a high rate of attention (95% on task) from high school students.

The purpose of the current study was to observe and describe an experienced choral conductor in rehearsal over a few months. By using an observation form similar to the one used by Wagner and Strul (1979), the researcher attempted to isolate those activities and interactions used by an experienced choral conductor in rehearsal. The frequency of different learning tasks, teacher feedback, and student attentiveness, as well as amount of time spent in various activities were studied.

## Observation Form

The Music Teaching Interactions-Activities Form (MTIA) (Moore, 1976) was used to collect data for this study. The MTIA was designed to record continuous events during a music lesson or rehearsal. The form included: (a) the number and kind of activities occurring chronologically in the rehearsal; (b) the number of seconds spent in each activity; (c) frequency of approvals and disapprovals given by the conductor; as well as (d) demographic information of the students being observed e.g. date, time, teacher, and observer. Continuous event recording necessitated immediate response from observers whereby changes in events were notated within five-second intervals.

Activities were coded by first letter abbreviations. The following operational definitions were used for each category:

I = Instruction occurs when the teacher is explaining rules, giving directions, clarifying the subject matter or lecturing.

P = Preparation is a teacher-directed activity whereby the teacher is getting ready to do something (e.g., distributing materials, waiting for student attention, arranging equipment or students before an activity commences, or students finding the next piece).

S = Singing is a music performance activity in which students participate with or without the conductor.

D = Discussion is a conversation between students and conductor about music subject matter. The conductor usually initiates discussion by asking a question.

LCS = Listen to Conductor Sing occurs when students listen to the modeling by the conductor.

LP = Listen to the Piano happens when students listen to the piano accompaniment or a model phrase or idea played to learn a vocal part.

ST = Speaking the Text to learn words or rhythmic context.

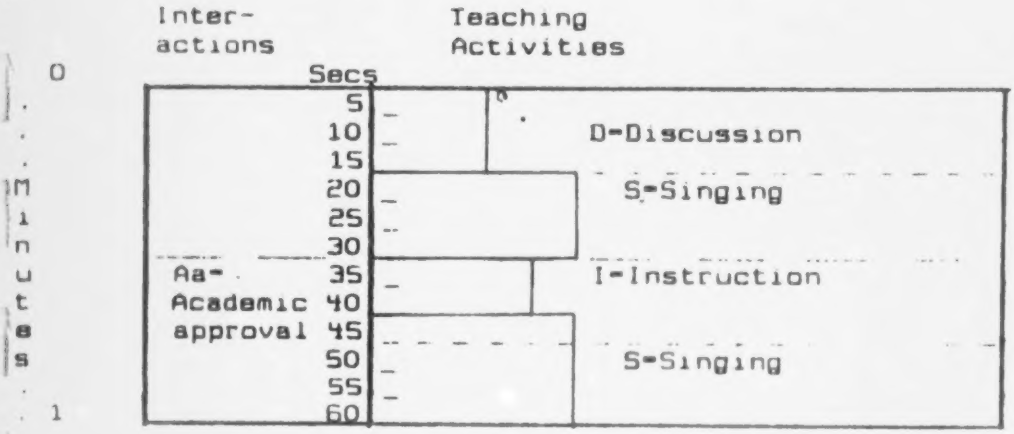
C = Clapping to improve the rhythmic accuracy of the performance.

Data were also collected on teacher/student interactions. The frequencies of interaction included the total number of social and academic approvals and disapprovals given by the conductor. The percentage of approvals was computed by dividing all teacher reinforcers into the number of approvals.

Reinforcement rate, the number of reinforcements per minute, is obtained by dividing the number of minutes in rehearsal into the frequency of reinforcers.

Observers record on the MTIA form by drawing vertical pencil lines down the Teaching Activities column as an event is occurring (see Figure 1). In order to collect data in "real" time, the observer records information while simultaneously listening to a pre-made cassette tape which indicates the passing of five-second intervals.

Figure 1. The Music Teaching Interactions-Activities Form.


Inter-
actions
Teaching
Activities
Secs
0
5
10
15
20
25
30
35
40
45
50
55
60
1
Minutes
D-Discussion
S-Singing
Aa-
Academic
approval
I-Instruction
S-Singing

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In this example the chronological events are: Conductor/student discussion 15 seconds, singing 15 seconds, instruction 10 seconds, and singing 20 seconds. One reinforcement, an academic approval, comes during the last ten seconds of singing during the first minute. With any change in activity, a short horizontal line is marked to indicate the beginning of a new event. As new events occur, they are labeled immediately with a code letter.

Data on complete forms delineate the sequential events in teaching time as well as record occurrences of conductor reinforcements.

## Procedures

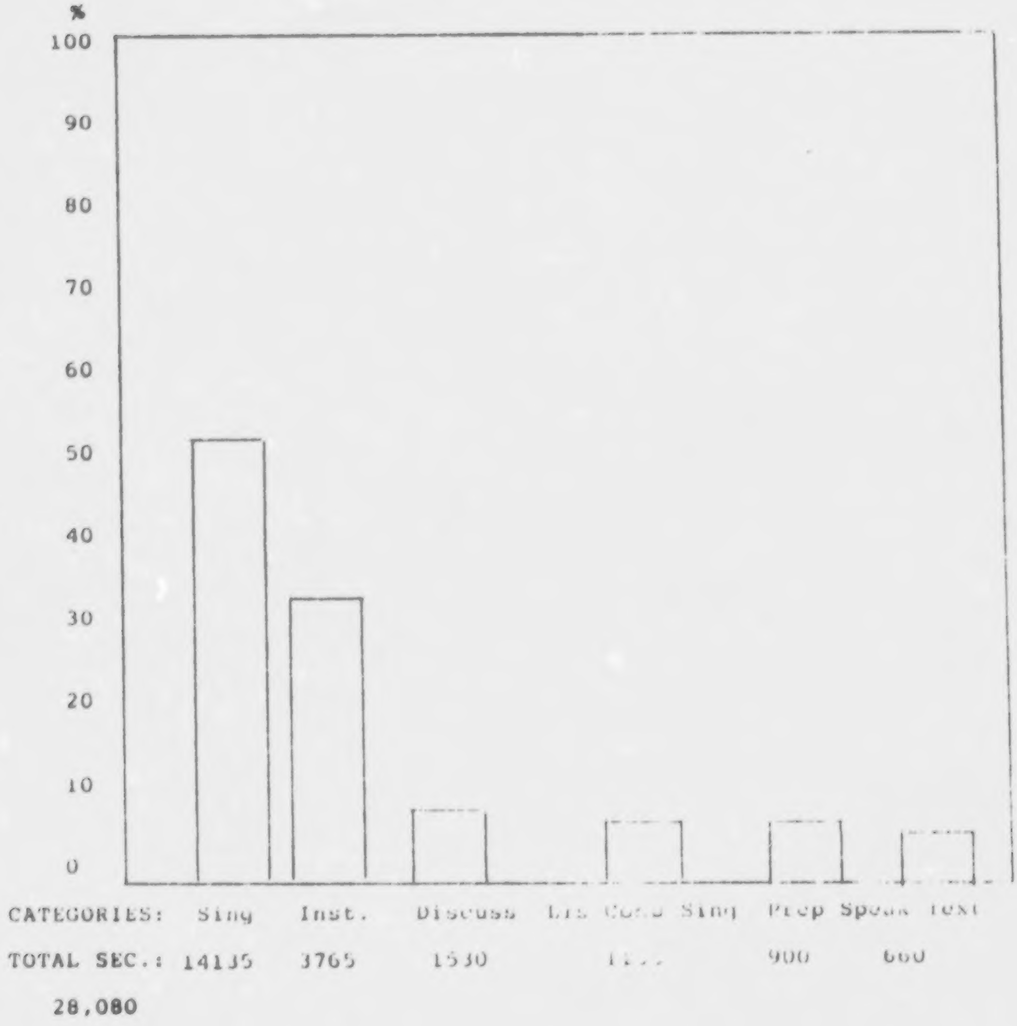
The selection of the experienced choral conductor for this investigation was based on the judgments of three choral experts who unanimously chose the best junior high school choral conductor in the area. The person selected had won three consecutive first place prizes in a division competition of junior high school choirs. For this study, the conductor was observed rehearsing a community children's choir over a six-month period. Rehearsals with the community children's choir occurred once per week after normal school hours. There were 46 young singers aged 10 to 12 in the ensemble.

Data were videotaped for evaluation and validation across 12 rehearsals. Twenty percent of the MTIA forms were completed by two observers who had 86% agreement on recording activity and interaction data. Percentage of agreements was obtained by dividing the number of agreements by the total agreements plus disagreements.

## Results

Data from the MTIA forms were tabulated in order to determine the amount of time used in the defined teaching activities. Results of the total observations were based on data from 7.8 hours of observation. The total number of seconds of rehearsal spent across seven activities is shown in Graph 1.

Figure 2. Percent of Rehearsal Time and Total Seconds Spent in Choral Activities.



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The singing activity, as expected, occurred most frequently (50.34%) followed by 31% of instruction time, 5.45% in discussion, 4% listening to the conductor sing, 3% in preparation and 2% on speaking the text. Within the time for singing, nearly 13% of that activity was done with the conductor singing, too. Nearly 38% of the choral singing was done without the aid of the conductor's voice.

In an analysis of variance test comparing the average time spent across the seven activities, a significant F ratio [F(6,203)=195, p<.001] clearly indicated that time was not divided equally among the seven activities. A subsequent Newman-Keuls comparison was made on the average number of seconds spent in each of the seven activities in order to determine which activities used the most rehearsal time. Results in Table 1 show that singing occupied more time in rehearsals than all other activities. Instruction took significantly more time than all other areas except singing. There were no significant differences among the average amounts of time spent in the other five categories.

Table 1

Newman-Keuls Comparison of Mean Seconds Spent in 7 Activities Across 12 Rehearsals

| Sing | Instruction | Discussion | Listen to Conductor Sing | Listen to Piano | Prep | Speech |
|---|---|---|---|---|---|---|
| 471 | 292 | 51 | 38 | 32 | 30 | 22 |

Underline indicates no significant differences at alpha = .01.

It is interesting to note the relationship between the total amount of singing with and without the conductor. Nearly one-fourth of the singing by the choir was supported by the conductor's singing. A correlation of .68 existed between choral singing with and without the conductor's singing, i.e., as the amount of choral singing increased from rehearsal to rehearsal, so did the amount of conductor's singing with the choir increase.

In addition to singing with the choir, the conductor also interspersed instruction and feedback. For 66% of the instances of singing no simultaneous instructions were given by the conductor. During 34% of the instances of singing, some instruction was given. When instruction was given during singing, it occurred on the average of every 6.8 seconds.

A comparison of the average length of the seven activities revealed a significant $\underline{F}$ effect, $\underline{F}(6,203)=11.9$, $\underline{p}<.01$. A subsequent Newman-Keuls comparison of the mean lengths of time across the seven activities indicated that singing lasted longer than any other activity. The length of time the conductor modeled or demonstrated singing for the youngsters averaged about 7 seconds while the children's singing usually lasted about 26 seconds. Children sang in intervals nearly four times longer than they listened to the conductor sing; they seemed to be kept more actively involved by this learning process.

Table 2

Newman-Keuls Comparison of the Mean Length of Activities in Seconds

| Sing | Prep | Ins. | Discuss. | Lis Pf | Sp | Lis Con Sing |
|---|---|---|---|---|---|---|
| 25.73 | 14.74 | 13.69 | 12.82 | 11.11 | 8.78 | 6.84 |

Underlined means are not significantly different at alpha = .01.

When the average number of occurrences of the seven learning activities were compared, a significant F ratio resulted [$F(6,203)=54$, $p<.01$]. Table 3 shows there were 87 occurrences of instruction by the conductor in every hour. There were 80 opportunities for the children to sing each hour. Instruction and singing on the average occurred more frequently than all other activities. While the mean number of times students listened to the conductor's vocal model was significantly less often than their own singing and listening to the conductor's instructions, students did hear the conductor's modeling 22 times per hour on the average.

Table 3

Newman-Keuls Comparison for Mean Number of Occurrences in Learning Activities per Hour

| Ins. | Sing | Lis Con Sing | Prep | Lis Pf | Discuss | Speech |
|---|---|---|---|---|---|---|
| 87 | 80 | 22 | 20 | 17 | 12 | 12 |

Underlined means are not significantly different at alpya = .01.

In the area of conductor feedback to student behavior, Table 4 shows that the conductor used a 75:25% ratio to approvals while student behavior was 95% on-task. The approval ratio of 75:25% was calculated by dividing the 430 total approvals by the 570 total reinforcements. Student attentiveness level of 95% was determined by multiplying the number of students (46) by the 468 minutes of observation of 21,528 total student minutes and dividing that into the total on-task of 20,236 student minutes.

Table 4

Conductor/Student Interaction Summary Table

| Conductor Feedback | Approval | Disapproval | Total |
|---|---|---|---|
| Academic | 348 (61%)[a] | 85 (15%) | 433 (76%) |
| Social | 82 (14%) | 55 (10%) | 137 (24%) |
| Total | 430 (75%) | 140 (25%) | 570 (100%) |

[a] Percent of total.

Academic approvals far outnumbered all other reinforcers; over 60% of all feedback was given to encourage good singing or understanding musical concepts correctly. More feedback was elicited for academic (76%) than for social (24%) behavior. Within the area of academic reinforcement, the conductor gave far more academic approvals (81%) than academic disapprovals (19%). In the category of reinforcement for social behavior there were more social approvals (61%) than social disapprovals (39%).

The average rate of reinforcement was 73.5 instances per hour or 1.23 reinforcers per minute for the 10-12-year-old choir members. One of the more interesting results was the amount of humor shown by the conductor. There were 9.1 instances of humor per hour or an average of one occurrence of humor every 6.6 minutes. Another finding that was surprising was the number of times the teacher used children's names. Nearly 22 names were mentioned by the conductor each hour or on the average one name every 3 minutes.

A summary of results from the observational data collected on the MTIA forms revealed seven musical activities and their percentage of the total rehearsal time:

1. Singing without the conductor singing -- 38%
2. Singing with the conductor singing -- 13%
3. Instruction -- 32%
4. Discussion -- 6%
5. Listening to the conductor's vocal model -- 4%
6. Preparation -- 4%
7. Speaking song texts -- 3%

The total frequency of conductor feedback to the children's choir showed nearly 74 reinforcers per hour with a 75:25% approval ratio. This positive emphasis reflected 61% of the feedback as academic approvals.

Student attention to the conductor-directed activities was 95% on-task behavior.

## Discussion

Analysis of the observational data indicated that the conductor selected for this study exhibited several factors that are frequently mentioned when describing an exemplary music educator. The conductor provided a high degree of positive feedback to the children who remained attentive throughout the rehearsals. This observation agrees with several earlier studies (Kuhn, 1974; Forsythe, 1977; Madsen & Alley, 1979). The conductor continually focused the choir's attention on "beautiful singing" by setting an example with her own voice. This observation is similar to that of Watkins (1986). The active use of conductor demonstrations during choral rehearsals agrees with investigation that Sang (1986) did with instrumental conductors.

The choral conductor in this investigation seemed to inspire students to do their best by being positive, using a rapid teaching pace, giving a variety of rehearsal suggestions that captured students' attention, and by accepting only their best efforts. Some of these same characteristics of teacher effectiveness were listed in research done by Coker (1976) and MacDonald (1976). One word that describes this experienced choral conductor is "intensity." The intense characteristics of good eye contact, facial expressions, and variable volume of the speaking voice are the same as those found by Yarbrough (1975) who isolated "magnitude" variables of choral conductors.

The conductor's delightful sense of humor added levity to rehearsals by demonstrating improper as well as proper ways to sing something. Sometimes she would sing a phrase as the children had sung it to reflect humorously what was wrong. Then she would show how to sing it properly and ask the choir to imitate her model immediately. The timing from conductor demonstration to choral imitation appeared to be an effective process in educating singers. From the author's experience in observing student teachers, beginning conductors give corrective feedback or model the desired choral response and then sometimes forget to have the choir immediately repeat it. It seems to be an incomplete teaching process that can be rectified by simply having the choir sing immediately after the model demonstration is heard. Yarbrough (1988) describes a three-step teaching unit that includes (1) initiating student action, (2) giving time for student involvement in music related activities, and (3) providing feedback concerning student actions.

The conductor also used children's names to add a personal dimension in her communication with the choir. The nearly perfect (94%) rate of attention by the choristers may be attributed to several factors which include a high percentage of student-centered activities, a variety of learning activities, much positive reinforcement, humorous and personal communication, and clearly demonstrated examples of how to sing. It was also observed that during instruction the conductor used some metaphorical descriptions that caught the interest of many children.

It appeared to the author that the conductor's enthusiasm and intensity for creating musical results in rehearsal made a definite impression on the young singers. They seemed to like the music and the conductor who maintained a positive and happy learning environment. These results concerning positive student attitudes agree with the findings of Murray (1974) and Yarbrough (1975) who investigated high school choral students.

Though the scope of this study was limited to only one exemplary conductor, a description of some of the teaching strategies that were observed might be of value to current and future choral conductors. The following suggestions are derived from this investigation:

1. Use a high (80%) ratio of approvals to create a positive learning environment.
2. Say students' names to personalize communication.
3. Demonstrate ways to perform a problematic section as opposed to talking about it.
4. Have students perform a problematic section of music immediately after hearing the conductor demonstrate how it goes.
5. Inject humor to build rapport and gain student appreciation.
6. Involve students in singing at least half the rehearsal time.
7. Set a rapid pace in activities with no dead time between varied tasks.
8. Sequence learning tasks into small enough units to guarantee success.

Recommendations for further study include (1) expanding the number and kind of conductors observed, (2) comparing the performance skills at the beginning and ending of rehearsals, (3) measuring student attitudes about the music and the conductor, and (4) testing for growth in musical achievement. An increase in the number of conductors observed would make the results easier to generalize; although, observing several conductors to the same depth as this one-case study would be very time consuming. Investigation of band and orchestral conductors may reveal rehearsal strategies idiosyncratic to instrumental performance. Comparisons of vocal skill performance is unfortunately missing in this study and could have revealed the benefits of effective rehearsal time across six months. Studies by Murray (1974) and Yarbrough (1975) did not show improvements in performance levels of high school choirs which exemplary conductors rehearsed for brief periods of time. Student attitudes concerning the music and conductor were not measured here and might have given pertinent information about the success of the rehearsals and implications for future rehearsals. Assessment of cognitive learning might indicate the effect of rehearsal strategies and show that students could grow in conceptual knowledge as well as improved performance skills.

## References

Coker, H. (1976). Identifying and measuring teacher competencies: The Carroll County project. Journal of Teacher Education, 27(1), 54-56.

Forsythe, J. L. (1977). Elementary student attending behavior as a function of classroom activities. Journal of Research in Music Education, 25(2), 228-239.

Geringer, J. J., & Kostka, M. J. (1984). An analysis of practice room behavior of college music students. Contributions to Music Education, 11, 24-29.

Kuhn, T. L. (1974). The effect of teacher approval and disapproval on attentiveness, musical achievement and attitudes of fifth grade students. In Research in Music Behavior. Madsen, C. K., Greer, R. D., & Madsen, C. H., Jr. New York: Teachers College Press.

McDonald, F. (1976). Beginning teacher evaluation study, phase II. Princeton, NJ: Educational Testing Service.

Madsen, C. K. & Alley, J. M. (1979). The effect of reinforcement on attentiveness: A comparison of behaviorally trained music therapists and other professionals with implications for competency-based academic preparation. Journal of Music Therapy, 16(2), 70-82.

Madsen, C. H., Jr. & Madsen, C. K. (1981). Teaching/discipline: A positive approach for educational development (3rd ed.). Raleigh: Contemporary Publishing Company.

Moore, R. S. (1976). Effect of differential teaching techniques on achievement, attitude and teaching skills of pre-service elementary music teachers. Journal of Research in Music Education, 24(3), 129-141.

Murray, K. R. (1974). The effect of conductor approval and disapproval on attentiveness, musical performance levels, and attitudes of high school choirs. In Research in Music Behavior. Madsen, C. K., Greer, R. D., & Madsen, C. H., Jr. New York: Teachers College Press.

Sang, R. C. (1986). A study of the relationship between instrumental music teachers' modeling skills and pupil performance behaviors. Paper presented at the Eleventh International Research Seminar of ISME, Frankfurt.

Wagner, M. J. & Strul, E. P. (1979). Comparison of beginning versus experienced elementary music specialists in the use of teaching time, use of reinforcement and student attitudes. Journal of Research in Music Education, 27(2), 113-125.

Watkins, R. E. (1986). A descriptive study of high school choral directors' use of modeling, metaphorical language, and musical/teaching language related to student attentiveness. Unpublished doctoral dissertation, University of Texas at Austin.

Yarbrough, C. (1975). The effect of magnitude of conductor behavior on musical performance, attentiveness, and attitude of students in selected mixed choruses. Journal of Research in Music Education, 23(2), 134-146.

Yarbrough, C. (1988). Music teaching may be in sonata-allegro form. In Madsen, C. K. & Prickett, C. A. (Eds.), Applications of Research in Music Behavior. Tuskaloosa: University of Alabama Press.

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